1859 PUBLISHED WEEKLY 1918

AMERICAN GAS ENGINEERING JOURNAL

FORMERLY

AMERICAN GAS LIGHT JOURNAL

VOL. CIX., No. 9
WHOLE No. 3156

NEW YORK, SATURDAY, AUGUST 31, 1918

Subscription $3 per year
$4 Canada $5 Foreign

In Transfer
SEP 10 1918

LIBRARY OF CONGRESS
SEP 3 1918
COPYRIGHT DEPOSIT

FROM A LITHOGRAPH, DRAWN ON THE STONE BY GEORGE BELLOWS

This is Kultur

THERE is no sharper contrast between German Kultur and the civilization that our forefathers died for than the difference in the attitude of the two civilizations towards women and children.

Kultur in Belgium, and other devastated countries, is a tale so terrible that never yet has one dared more than whisper fragments of it. Yet the wrongs of Belgium, as a State outraged, pale beside the wrongs inflicted in savage, bestial revenge upon its defenceless women and children.

Such a civilization is not fit to live. And, God willing, it shall be mended or ended. To this task America summons every loyal heart and hand. It is a Crusade, not merely to re-win the tomb of Christ, but to bring back to earth the rule of right, the peace, good will to men and gentleness He taught.

To carry on this crusade of modern righteousness means not merely that our young men shall cross the seas to fight the Hun. It means that we at home shall uphold them. It means that we shall back them with all things spiritual and material. It means that we shall lend, not merely from our plenty, but that we shall save and serve. It means that we shall give up many things that are dear to us: sacrifice, that our Crusaders may save us and our children from the horrors that have come to the little ones of Belgium and of France.

Buy U. S. Government Bonds Fourth Liberty Loan

Contributed through Division of Advertising United States Govt. Comm. on Public Information

This space contributed for the Winning of the War by

THE LONG-LANDRETH-SCHNEIDER CO., New Brunswick, N. J.

Manufacturers of "Kompak" Water Heaters

INDEX TO CONTENTS, PAGE 204 ADVERTISERS' INDEX, PAGE 20

The Gas Machinery Company

Cleveland, Ohio

COAL GAS PLANTS **WATER GAS PLANTS**

BY-PRODUCT MACHINERY

NOTE:—

This advertisement is only to keep
you reminded of the

U. G. I. Vertical Retorts

The best system of coal carbonization
in America today

Figures prove this and the guarantees of

THE UNITED GAS IMPROVEMENT CO., Philadelphia

Back it up

Entered as second-class matter January 9, 1917, at the post-office at New York, N. Y., under the Act of March 3, 1879.

AMERICAN
GAS ENGINEERING JOURNAL

FORMERLY THE AMERICAN GAS LIGHT JOURNAL

Vol. CIX, No. 9 NEW YORK, AUGUST 31, 1918 Whole No. 3156

LIBRARY OF CONGRESS SEP 3 1918

The Bonus System as Applied to the Collection Department of a Public Utility

Only Drawback in Results Is Overzealousness—Despite Labor Shortage Waiting List for Position as Collector Is Always Existent—Why the Straight Bonus System Does Not Appeal

By PAUL BUCHER
Assistant Treasurer, Kings County Lighting Company, Brooklyn, N. Y.

The proposition of paying a man in proportion to the work he does is very attractive to the ambitious and industrious individual. It is not feasible, however, to apply this system for all human effort, but we frequently see a tendency to adopt the principle so that it may be partially or indirectly applied. This is accomplished partially by the salary-and-commission or salary-and-bonus method and indirectly by the profit-sharing plan, whether such profit-sharing comes from a percentage of the business or from dividends on the company's stock held by the employee.

It is the salary-and-bonus method that is considered here in connection with a collection department of a public corporation. The reason for not adopting a straight bonus method is psychological. To the writer's mind, the straight bonus system of paying collectors from results is the only logical one to adopt, if it is possible to secure men for this work who will realize the benefits accruing to them. They feel, however, that a salary, with its benefits of vacation, leave of absence due to sickness or personal business, regularity, since the collection results may diminish through no fault of their own, and a feeling of being on a more intimate footing with the company, more than compensates for the increased monetary consideration that would accrue with the straight bonus system.

Successful Application of Method Influenced by Company's Policy and System

The successful application of this method is influenced by the company's policy and system. If they change, the bonus system should be changed, if the latter system is fixed; or it will accommodate itself to the company changes, if it has been laid out on lines sufficiently elastic to accommodate any reasonable departure from existing practice.

To illustrate, let us assume that the company's policy has been very liberal, so much so that it does not press its collections. And, further, that the ledger clerks are keeping their ledgers well posted and all bills are promptly given the collectors. Suppose, now, a bonus system has been devised based on several months' performance of the collectors, so that the best collector, whom we shall assume has not been keyed up to his maximum effort, earns not more than $5 above a certain standard salary. Now, through reorganization or need of funds, etc., comes a radical change. Wide publicity is given the consumers that the company is compelled to press collections of all of the amounts outstanding and that consumers who do not pay will be shut off. The effect is marked, and the collectors instead of turning in a few collections for large amounts will turn in many for small amounts.

PAUL BUCHER

If the bonus system has been based on the number of bills delivered and the number of collections made, obviously the collectors will receive a greatly in-

AMOUNT OF BONUS
ON DELIVERY AND COLLECTION
OF BILLS

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9
20	0	.000	.001	.006	.008	.01	.012	.014	.016	.018
21	.02	.022	.024	.026	.028	.03	.032	.034	.036	.038
22	.04	.042	.044	.046	.048	.05	.052	.054	.056	.058
23	.06	.062	.064	.066	.068	.07	.072	.074	.076	.078
24	.08	.082	.084	.086	.088	.09	.092	.096	.096	.098
25	.10	.102	.104	.106	.108	.11	.112	.114	.116	.118
26	.12	.122	.124	.126	.128	.13	.132	.134	.136	.138
27	.14	.142	.144	.146	.148	.15	.152	.154	.156	.158
28	.16	.162	.164	.166	.168	.17	.172	.174	.176	.178
29	.18	.182	.184	.186	.188	.19	.192	.194	.196	.198
30	.20	.202	.204	.206	.208	.21	.212	.214	.216	.218
31	.22	.222	.224	.226	.228	.23	.232	.234	.236	.238
32	.24	.242	.244	.246	.248	.25	.252	.254	.256	.258
33	.26	.262	.264	.266	.268	.27	.272	.274	.276	.278
34	.28	.282	.284	.286	.288	.29	.292	.294	.296	.298
35	.30	.302	.304	.306	.308	.31	.312	.314	.316	.318
36	.32	.322	.324	.326	.328	.33	.332	.334	.336	.338
37	.34	.342	.344	.346	.348	.35	.352	.354	.356	.358
38	.36	.362	.364	.366	.368	.37	.372	.374	.376	.378
39	.38	.382	.384	.386	.388	.39	.392	.394	.396	.398
40	.40	.402	.404	.406	.408	.41	.412	.414	.416	.418
41	.42	.422	.424	.426	.428	.43	.432	.434	.436	.438
42	.44	.442	.444	.446	.448	.45	.452	.454	.456	.458
43	.46	.462	.464	.466	.468	.47	.472	.474	.476	.478
44	.48	.482	.484	.486	.488	.49	.492	.494	.496	.498
45	.50	.502	.504	.506	.508	.51	.512	.514	.516	.518
46	.52	.522	.524	.526	.528	.53	.532	.534	.536	.538
47	.54	.542	.544	.546	.548	.55	.552	.554	.556	.558
48	.56	.562	.564	.566	.568	.57	.572	.574	.576	.578
49	.58	.582	.584	.586	.588	.59	.592	.594	.596	.598
50	.60	.602	.604	.606	.608	.61	.612	.614	.616	.618
51	.62	.622	.624	.626	.628	.63	.632	.634	.636	.638
52	.64	.642	.644	.646	.648	.65	.652	.654	.656	.658
53	.66	.662	.664	.666	.668	.67	.672	.674	.676	.678
54	.68	.682	.684	.686	.688	.69	.692	.694	.696	.698
55	.70	.702	.704	.706	.708	.71	.712	.714	.716	.718
56	.72	.722	.724	.726	.728	.73	.732	.734	.736	.738
57	.74	.742	.747	.746	.748	.75	.752	.754	.756	.758
58	.76	.762	.764	.766	.768	.77	.772	.774	.776	.778
59	.78	.782	.784	.786	.788	.79	.792	.794	.796	.798
60	.80	.802	.804	.806	.808	.81	.812	.814	.816	.818

creased bonus, not through greater efforts of theirs but through the policy of the company having been changed.

Effect of Company's Bookkeeping on Bonus System

Now, also consider the effect of the company's bookkeeping upon the bonus system. If instead of the bills going out correctly and regularly labor conditions cause them to go out with a large number of mistakes, and in varying amounts from day to day so that the collectors will take it easy one day and be rushed to death the next, the result will be detrimental to the collectors, since they are unable to secure the advantages to which the company's policy, as above outlined, would entitle them. The net result might be large or might be small, depending upon the numerous variables, but would be evil in any case, seen from the collector's viewpoint, because the bonus system is fixed and the collector realizes that the advantage to him from the change of company policy is offset, and to his mind more than offset, by the poor work by the bookkeepers that retard his progress.

Such a bonus system is bad for the company also, since the results would be larger than it could afford to pay if the bookkeeping is good. The bonus system in this case would have to be revised, although this solution would inevitably result in general dissatisfaction.

A system based on money turned in is unfair to the collectors and to the company, and should not be considered, since it requires no more effort to collect a large amount that it does a small one.

A more flexible system would be based not only on the direct, but on the indirect, results of the collector. Such a system involves the standing of the ledgers. The collectors are paid a bonus above a certain percentage of the bills delivered and collected, and are paid an additional bonus if the percentage of accounts receivable converted into cash passes a certain amount. Or, in other words, the collector gets credit for what he brings in and what he drives in. Obviously such a system involves the bookkeeper, since the collector of a certain ledger is only as good as the bookkeeper allows him to be. But if the bonus also is given the bookkeeper for a certain standing of his ledger, he will see to it that his collector is given the best possible results. The outcome of such a system is not so rigid as the system for giving a bonus based only on bills delivered and collected. If the collector is good he will get a small bonus on his individual work, but will complain if his bookkeeper is falling down on him so he cannot earn the bonus based on the ledger standing. On the other hand, the bookkeeper has the whip

TABLE TO FIGURE
COLLECTORS' BONUS
for
DELIVERY OF BILLS

	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
0	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
100	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9
200	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	4.7	5.8	5.9

hand and will complain if the collector is not turning in his best results. The percentages set for the bookkeeper bonus should be graduated so that if the books are in poor condition there will be an immediate interest taken by the bookkeeper. If the percentage is so high that the bookkeeper sees no prospect of earning a bonus for three or four months, his interest immediately wanes. It would be better in this case to allow the final standard to be reached in the third month.

Disadvantage of Semi-elastic Bonus System

The percentages upon which to base the bonus and the amounts to be granted for every 1 per cent above the standard are, of course, a matter for each company to determine, since there are important considerations entering that differ in various places.

It is recommended that the unit-bonus figure used for notices be the same as for bills, and for collect-or-shut-off deliveries double that for bills. The reason for this is that it is to the advantage of the company to collect on presentation of the bill to save second or third calls, to grant no greater bonus for notices than for bills, since the notice is a token of the company's intention of discontinuing the supply, and as such its influence compensates for the scattered distribution; and, finally, it is best to increase the bonus to the collector for collect-or-shut-off calls, since it is not to the company's benefit to shut off its consumers. Such a step is a last resort, and is usually accompanied by the additional expense of turning the consumer on again as soon as the bill is paid.

The unfortunate part of the semi-elastic bonus system is that it involves a considerable amount of work to calculate the amount of the bonus. Since a bonus will in part be based upon the standing of the ledgers, it is necessary to list the work of the collectors by ledgers. It is policy to change collectors frequently, sometimes every trip, and in no case

COLLECTION OF BILLS

	0	1	2	3	4	5	6	7	8	9
		.48	.96	1.44	1.92	2.40	2.88	3.36	3.84	4.32
10	4.80	5.28	5.76	6.24	6.72	7.20	7.68	7.68	8.64	9.12
20	9.60	10.08	10.56	11.04	11.52	12.00	12.48	12.48	13.44	13.92
30	14.40	14.88	15.36	15.84	16.32	16.80	17.28	17.28	18.24	18.72
40	19.20	19.68	20.16	20.64	21.12	21.60	22.08	22.08	23.04	23.52
50	24.00	24.48	24.96	25.44	25.52	26.40	26.88	26.88	27.84	28.32
60	28.80	29.28	29.76	30.24	30.72	31.20	31.68	31.68	32.64	33.12
70	33.60	34.08	34.56	35.04	35.52	36.00	36.48	36.98	37.44	37.92
80	38.40	38.88	39.36	39.84	40.32	40.80	41.28	41.28	42.24	42.72
90	43.20	43.68	44.16	44.64	45.12	45.60	46.08	46.08	47.04	47.52
100	48.00	48.48	48.96	49.44	49.92	50.40	50.88	50.88	51.84	52.32
110	52.80	53.28	53.76	54.24	54.72	55.20	55.68	55.68	56.64	57.12
120	57.60	58.08	58.56	59.04	59.52	60.80	60.48	60.48	61.44	61.92
130	62.40	62.88	63.36	63.84	64.32	64.80	65.28	65.28	66.24	66.72
140	67.20	67.68	68.16	68.64	69.12	65.60	70.08	70.08	71.04	71.52
150	72.00	72.48	72.96	73.44	73.92	74.40	74.88	74.88	75.84	76.32

Name of Company

Collectors Bonus Report Month of July, 1918.

Name of Collector	Bills Led	Bills %	Bills Bonus	Notices Led	Notices %	Notices Bonus	Delinquents Led	Delinquents %	Delinquents Bonus	Finals Led	Finals %	Finals Bonus	TOTAL Field Work Led	TOTAL Field Work Bonus	Ledger Standing Led. No	Ledger Standing No. Dec.	Ledger Standing %	Ledger Standing Bonus	Collectors Standing	Total Bonus
Doe, John	300	21.5	30	300	53.4	2.00	300	85.0	10.00	300	3	.94	300	3.45	300	19	90	7.60	#7	24.29
" "	301	23.8	46												301	6	75	0	-	.46

Remarks:-

Signed:-

Chief Clerk, Collection Bureau.

should a collector work on a ledger for more than one month.

As these changes are always made unannounced, it follows that a collector will always work on more than one ledger during the current month. This applies to bills, notices, collect-or-shut-off deliveries, and final bills. Since it is necessary to assign different value for bills than for collect-or-shut-off deliveries, it will be seen that the calculation of the amount of bonus due becomes quite involved. Nevertheless, in the opinion of the writer, it is justified from the results secured.

The amount of calculation necessary is easily shortened by the use of tabulated figures. There are here given three tables to show the system for computing the bonus on bills used by one concern. This company assigned different values for bills delivered and for collections made. A careful study of the district and the past work of the collectors showed that two hundred bills could be delivered per day. This was, therefore, called the standard; but as deliveries were less important than collections, there was assigned to deliveries one twenty-fourth the value of collections. Therefore, if a collector delivered two hundred bills per day he was given 4 per cent as a rating. Also, if he collected two hundred bills per day he received the balance of 96 per cent rating. In this company investigation showed that the collectors, while delivering two hundred bills per day, did not average more than thirty-three and one-third collections. This, then, was assigned as a standard day's work for collectors, and they were paid a salary to deliver this amount of work for bills delivered and collected:

Two hundred bills	4 per cent
Thirty-three and one-third collections	16 per cent
Total	20 per cent

All results in excess of this 20 per cent were paid by a bonus at the rate of 2 cents for each 1 per cent. This bonus was on a monthly average, and not daily, since results vary widely from day to day.

To calculate the bonus, therefore, on delivery and collection of bills it is only necessary to calculate the average daily work done and use the following tables to get the bonus to be allowed per day. Multiplying by the number of days the collector worked on bills will give the bonus on bills for that month.

All Collectors Given Same Salary

All collectors were given the same salary, thus furnishing a common starting point.

To illustrate the use of the above tables:

A collector on the average delivered 210 bills per day for five days on No. 300 ledger and collected an average of forty accounts. The table shows for delivery of bills he is entitled to a rating to be 19.2 per cent. The total is 23.4 per cent, and by referring to the third chart it will be seen that the bonus to be allowed for 23.4 per cent is $0.068. Multiplying by the number of days (five) for which this represents an average, the collector would receive 34 cents.

The tables are also made up for other work of the collectors, but the bases of figuring are changed. For instance, the number of notices to be delivered in one day has been standardized at 100; but this would not be taken to mean that a collector cannot do more, but it is used to simplify figuring the amount of the bonus. The bonus here is also 2 cents for each per cent over 20 per cent. In figuring the bonus for delinquent collectors, which is the name given collectors on the collect-or-shut-off trips, the same 100 has been used to standardize the work but the per cent standard has been dropped to 15. For every 1 per cent over 15 per cent the bonus is 2 cents. Final bills are in scattered territory that

Name of Company

Collectors Report Month of July, 1918.

Name of Collector	Bills Led	Bills No Da	Bills No Bills	Bills No Collect	Bills $ Amount	Notices Led	Notices No Da	Notices No Notices	Notices No Collect	Notices $ Amount	Delinquents Led	Delinquents No Da	Delinquents No Del.	Delinquents No Lock	Delinquents No Collect	Delinquents $ Amount	Finals Led	Finals No Da	Finals No Delin.	Finals No Collect	Finals $ Amount	Total Collected
Doe, John	300	10	2159	358	1510.10	300	3	318	152	892.18	304	5	422	10	321	1200.00	300	1	22	5	31.29	3633.57
" "	301	6	1325	242	573.20																	573.20
Total																						

Remarks:-

Signed

Chief Clerk, Collection Bureau

the regular collector cannot reach. Special trips are necessary and the bonus has been figured on a basis of the amount and age of the bill. The maximum percentage is 8 per cent for bills of under $5 and over a year old.

The ledger standing is taken at 85 per cent, as many of the bills are made out at the last of the month and there is no opportunity for the collector to drive or bring in all accounts. The standing of the ledger being divided by the bookkeeper and the collectors in equal amount, it is therefore necessary to prorate the time of each collector on this ledger. Four dollars is allowed for each per cent above 85. Thus if a ledger has 90 per cent of its receivables converted into cash, the bonus is $20, of which the bookkeeper gets $10 and the remaining $10 is divided among the collectors in proportion to the time they spend on that particular ledger.

No allowance is made for less than one day's work, and every endeavor is made to keep a collector engaged on a certain ledger for that day. If it is necessary to put a collector on several ledgers, he is given credit for that day to the ledger he spent most time on. The result of his work in money is, of course, put to the ledger it belongs, but the above was devised to avoid the trouble of computing a bonus for split days. The results are tabulated at the close of the month.

Reports on Collectors

It will be at once evident, if a collector's work is poor he will not receive a bonus for field work and this will show up on the report. Explanations must accompany these reports as to the reason for the poor showing of any collectors, whether it is the fault of the bookkeepers, the ledger district being hard to collect, or indifferent work.

Separate reports should be made of the work of the collectors in the field and of the amount of bonus they have earned. These can be shown as follows:

The main trouble with the company that uses the above system is to hold the collectors back. In spite of the fact that labor troubles are acute, there is a waiting list for the position of collector. The results, except for overzealousness, have been excellent. What is better, too, is the awakened interest of the collectors, evidenced by the fact that they are constantly making suggestions that improve the service.

The above company received its money by mail, by collectors and by personal payments. After the bonus system was started the three items were carefully watched, but there has been no perceptible difference in the three percentages, although all three showed a marked increase.

In conclusion, it may be restated that the way to promote good work is to awaken the personal interest of the workers, and a judicious use of a bonus system will serve more toward this end than the payment of high salaries or other similar inducements.

Wants Committee Devoted to Vigorous Pushing of Development of Gas Industry

George W. Allen Emphasizes Importance of Applying Little Things and Applying Them Right

Much has been said and written about the future of the gas industry, but if we were to take the average man's idea of the future of the industry as a criterion we would not have any future at all, declared George W. Allen in his paper before the recent convention of the Canadian Gas Association.

Success of Industry Depends on Individual Effort

The success of the gas industry in the future will be the sum of the efforts expended by each and every individual in the industry. We must have men in our ranks who believe in the business and are willing to work in its interests for the common good of all. In fact, all of us should put forward an honest endeavor to make it a success, whether we have the fact or not to substantiate our faith in the business.

In a small way I have in the past put forward every effort at my command to stimulate interest in our industry, but standing alone in any work is not always what it is "cracked up" to be.

I believe, however, there should be a committee brought into existence for the express purpose of vigorously developing the gas industry.

Quoting in part from an editorial entitled "Vigorous Development Committee for the Gas Industry," written by Walter King, editor of the *Gas Journal*, of London, issue of June 25, 1918: "There is not in existence a committee answering the description in our title. It may, therefore, in a measure, be somewhat misleading. Such a committee, however, is a vital want in the gas industry to-day, and it is a matter of the greatest importance that a very strong effort should be made to secure some general movement in regard to the establishing of one, and to get it to proceed to work without delay.

"There are in the gas industry men who appear incapable of seeing the facts of the position as they are; there are those who are lethargic in regard to these facts, and there are those who are content to think that, though the war has sent difficulties in veritable deluge on the industry, it has also revealed such potentiality in extended service of the industry that all will be well. It will not be well with the industry unless some determined movement is made to defend its birthright and to plan it, and to make secure the lines of its destiny.

Lack of Leadership

"For years we have been preaching the need for a strong organization representative of the whole of the interests of the gas industry. Very largely what has been said has fallen on deaf ears, and in the result only a little patching up has been done. During the period of the war effort has been made in these columns, with other industries on the alert and making a move to consider their positions, to get the industry to adopt a definite reconstruction and progressive policy. But nothing has been done except a little research into the composition of gas. It seems the industry is without any attempt to help its adopting the pusillanimous course of waiting for something to turn up, and the continued pursuing of this course means (it is as certain as anything mundane can be) disaster—disaster, not precipitate, but gradual decline, from which there will be little chance of rescue, owing to the well defined progressive policy and advancement of competing industries.

"What we are lacking to-day in the gas industry is strong and concentrated leadership. Let us be plain; it is the time for plain words. . . ."

From here on Mr. King, in his editorial, brings out the vital need for men who have made a success in the industry, taking the leadership—acting protagonists in the cause of the industry, and he states it is better the facts should be recognized and accepted, as it will enable us to get on firm grounds. I would advise the members of this association to read Mr. King's editorial in full.

Mr. King further states: "Let the gas industry show at once, by forming a strong and live committee to take up this matter, that there are within it men who feel the responsibility of the present position in its relation to the future, and who want that future to be a striking testimony to their alertness and statesmanlike handling of the position of to-day."

We must endeavor to disabuse the public mind of the belief that gas is a back number and that electricity will sooner or later supplant it for general purposes, and it is up to each one of us here assembled to do what we can, through public advertisements, or through spoken words, or otherwise, to educate the people to the importance of gas as a public benefactor.

It is really remarkable how many electrical engineers there are who have lately come forward with statements to the effect that gas has a useful place in the future of our country, and that there is not an unlimited supply of electricity to take care of the requirements for every purpose in which gas is now used.

Gas Coming Into Its Own

We ought to make every effort to see that no statements appear in the public press that may be detrimental to the good of our industry, and whenever such harmful publicity does appear we ought to, individually, take on our own shoulders the task of refuting such statements. Good work has been done in the past by the "Harmful Publicity Committee" of the late National Commercial Gas Association in this regard, and we trust that the newly formed American Gas Association will go on with the good work. The writer, as secretary of the Canadian Gas Association, will be pleased at any time to receive notice of any harmful publicity that may be published in the various journals, and he will make an endeavor to reply to same. The press agencies connected with the electrical industry are continually busying themselves with supplying the press with the many and varied services in which electricity is now being used, and this association ought to be doing something along the same lines.

The truth that gas is coming into its own goes without saying with those who know the situation, and a few extracts from reports by eminent authorities in this connection may be of interest at this time.

Electricity as a Heating Agent

That gas for illuminating purposes has not as promising a future as electricity may be granted, but still there are thousands and hundreds of thousands of homes throughout the country that will be a long time throwing out gas because of the fact that there is not yet, and will not be for many years, sufficient electrical energy to supply the many local and general lighting requirements.

Electricity as a heating agent, whether used for cooking, baking, ironing and for many other purposes, is no longer an experiment, but would be an admitted success, as far as doing the work is concerned, if it were not for the fact that the use of electricity for such purposes is nothing short of a national crime when consideration

(*Continued on page* 206)

Montreal Company's Industrial Gas Sales for Shell Manufacturing at the Rate of 360,000,000 Cu. Ft. Per Year

Charles D. Slimpin Believes in the Principle of Going After the Easily Gotten Business at Present Time — Too Much Real Good Accessible Business Existent To-Day, He Declares, To Spend Much Time Figuring on Impossible Jobs

We were fortunate enough to be given a trial in the first shell manufacturing plant in this vicinity, and in a short time had made good not only in this plant, but in many others, and up to the present time we have sold gas for this line of work amounting to about a half a million dollars, and our sales at the present time are at the rate of 360,000,000 cu. ft. per year, declared Charles D. Slimpin, in his paper before the recent convention of the Canadian Gas Association.

Best Success Where Smaller Shell Are Made

We have had our best success and results in the plants where shrapnel shells, bullets, time fuses, cartridge cases, etc., and high explosive shells up to 6-in. are made, and have several plants that are all gas. In some of the plants where large size, high explosive shells are made, we have been content with getting only business such as shell drying ovens, copper band work, tool room equipment and nosing furnaces. One plant in particular uses 4,000,000 cu. ft. per month, but at the same time they use 5,000 gal. of oil per day in furnaces for heating billlets which are pressed or forged into shells; this business we have left alone, as even if we could make good on the work we would be up against it to supply the amount of gas required. There is too much real good accessible business for industrial gas to-day to spend very much time figuring on impossible jobs or jobs that only mean trouble from the time you start.

All Heat Treating of Tools in City Done by Gas

Practically all heat treatment of tools in this city is done with gas, although every little while some company will have electric equipment installed, usually on trial, but as a rule a few months is sufficient to see the gas furnaces back into use.

We have one plant here in this city turning out American 75 M.M.H.E. shells using gas for their entire work, and their consumption at the present time is about 10,000,000 cu. ft. per month, their output being 6,000 to 7,000 shells per day; this figure is to be increased to 10,000 per day as soon as possible, and the gas consumption will increase correspondingly.

In the heat treatment room, which is about 40 x 70 ft., the consumption of gas amounts to about 9,000,000 cu. ft. per month.

Core Ovens

In a large steel foundry gas ladle heaters and gas-fired core ovens have given us an average consumption of 1,500,000 cu. ft. per month. The company is turning out billets for shells, the metal being melted in electric furnaces.

Gas is and has been successfully used for nosing of shrapnel and high explosive shells up to 6-in. in size.

For all work in connection with fuses and caps, from the melting of the metal to annealing for pressing and for assembling of parts.

For the manufacture of paints and varnishes and for drying or baking of same after being placed on shells.

For the melting of bullet metal for shrapnel, one company in particular, with an output up to 80,000 lb. per day, having an all-gas plant.

For soldering powder cups, cans, etc.
For annealing cartridge cases.
For all tool work.
For shrinking copper bands on shells.
For melting rosin for shrapnel.
For annealing and tempering various size shells.
For tube annealing.
For sand-blast dryers, etc.

In practically all these places the gas appliances are home-made or rebuilt, as at the time this business began coming on it was impossible to secure what was required, as no manufacturer had stock appliances of the right kind, and delivery was too important an item to take a chance on. Some of these appliances were made and in operation in only a few days after giving the order, our company seeing to it that the burners, etc., were made and installed so as to get the best results possible. In appearance some of these first furnaces looked pretty crude, but they would compare with any as to efficiency and stability.

During the past few months we have been utilizing the waste heat as much as possible for preheating shells, etc., especially for nosing purposes, and for preheating the air, and while there is no doubt a good saving effected, I am not prepared to state how much, as we have had no way of testing this out.

Fire Underwriters' Preference

I am also of the opinion that the continuous heating furnaces, a few of which are now being built for use on H.E. and shrapnel shells, will materially cut down fuel costs per shell and increase output. There has been a large amount of gas used in ovens for baking varnish and drying paint on shells. One plant here in this city has seven of these ovens in operation. There are a total of twenty-four gas-heated ovens for shell work in use at this time. The ovens vary in size from 4 to 6 ft. high by 9 to 12 ft. wide.

We also have a few gas-fired japan ovens in use here, the principal ones being the Devoe Electric Switch

Company, the Ford Motor Car Company and the Alaska Feather & Down Company. The last named company manufacture beds, and gas is the only fuel used in the factory, all their forging, etc., being done with gas furnaces.

I understand that the Ford company also operate gas-fired japan ovens in their Toronto branch, although electric oven companies claim that electricity is replacing gas for this class of work in many places in the States.

Quite recently we had been figuring on a large job of this nature for gas, and specifications and prices have been submitted for nine units of ovens having cubical contents space of approximately 24,000 cu. ft., but I have been informed by our customer that the Underwriters' Association to whom these were referred have recommended that they install electrically heated ovens instead, and prices and specifications for these have been submitted. Here in this city it really makes no difference whether they use gas or electricity, as we get the business anyway, but the gas fraternity at large should watch such cases as these, as evidently the Fire Insurance Underwriters' Associations favor electricity, whether with cause or not is a matter to be thrashed out.

In a brass and copper wire works we have rather an unusual installation of three circular upright annealing furnaces. The first one of these furnaces to be installed was shipped from England, and on arriving here was stored for a few years and parts were missing, the burners especially, when we were asked to put it into working order. We succeeded in the work, and a short time ago the company built two more furnaces. We supplied the burners, etc., and very good results are had. This company also uses a gas-fired steam boiler for heating tanks of cleaning solution.

In a large sheet metal works there has lately been installed a large annealing oven for heating tanks for stamping or shaping.

There are two can manufacturing companies here who are large users of gas, the American Can Company having just completed what might be termed a model plant. Outside of heating their building, gas is the only fuel used for all their work. This company is using an automatic gas system.

The Whittal Can Company is another all-gas plant, they also having an automatic gas system.

In a plant where horseshoe calks are made is a large size continuous heating machine for heat treating their product; this machine is equipped with a pyrometer temperature control device.

Blueing Piano Pins

In a steel works we have converted an old oil-fired tumbling furnace into a gas-fired continuous heating furnace for blueing piano pins, bolts, nuts, etc. In the same plant we have also converted several large oil-fired hardening and tempering furnaces to gas, Eclipse gas-fired, high-speed steel furnaces being used for the particular work.

In the two railroad shops we secure a gas consumption of about 24,000,000 cu. ft. per year, gas being used for many purposes, chief of which are tire heating, flue welding, tool room work, and for soldering and brazing.

In Glass and China Works

In the glass and china works we have several good jobs. In one place are four large size china kilns and many other appliances. In another is one large size kiln. In a large plate-glass wholesale company is a combination annealing, tempering and glass burning kiln. Many of the various institutions in the city are also using gas-fired china kilns.

Among the newspaper plants and allied lines we have secured considerable business and have several all-gas plants, the largest being the Gazette Printing Company, who are using two gas-fired stereotyping furnaces, one 1-ton and one 7-ton. They also have a gas-fired electrotyping furnace, a dross refiner, linotype metal furnace, three gasteam boilers, and other various equipment.

It is understood, of course, that all linotypes or monotypes are gas-heated in all printing plants.

We have in many cases installed home-made siphon blast burners in small stereotyping furnaces, and secure very good results with them. We have found from experience that the easiest way to make good on this class of work is to study their operating conditions and see how small an amount of metal can be carried in the pot and still enable them to turn out their work as it should be, and then keep this amount down as low as you can (this does not mean to cut so low that the heat is uneven), as in nearly all cases you will find furnaces with from 100 to 300 per cent more metal in them than they use in casting in a whole day, and it costs money to keep all this metal hot and ready for use or to remelt each day.

Gas certainly will cut down their losses through dross if they handle it properly and it lightens the work of the operators.

Every matrix table in the city is heated either by gas direct fired, gasteam boilers or with electricity.

We derive a revenue on the sale of 30,000,000 cu. ft. of gas per year to the printing companies.

The gasteam boiler is one of the most reliable and satisfactory gas appliances on the market to-day, and their use is becoming more general everywhere. Prospects for gas boilers can be found in nearly every establishment in any city where steam is used in small quantities. We have about 300 hp. of gasteam boilers in use here in sizes of from 1 hp. to 16 hp. This figure does not include the innumerable small boilers used in shoe factories, pressing shops, etc. In many cases gasteam boilers actually save the customer money on his fuel alone, making no allowance for saving of labor, eliminating dirt, inconvenience, etc., caused by coal-fired boilers.

Good Prospects

We have found the following classes to be very good prospects: Newspapers and printers, photoengravers, hat makers, shoe factories, bottling companies, lunchrooms, tire repair shops, clothing companies, cleaning, pressing and sponging works, tobacco companies, bakeries, confectioners, dairies, glove companies, paper box companies and others. Through this class of appliances we secure a gas consumption of at least 30,000,000 cu. ft. per year.

The small bakeries and confectioners are also a very fruitful field for the sale of large quantities of gas, and while we are now selling 36,000,000 cu. ft. per year we expect to increase this greatly during the next few

months by gas installations in existing bake ovens and new gas-fired ovens and confectioners' furnaces.

We feature the fan-blast type of furnace, as we find it to be most satisfactory both as to cost of operation and speed. As to cost of gas for making candy, will say that the figures one gives may not work out the same in other places as operating conditions are not always the same.

Gas Bill as Small as Other Fuel Bill Was

In the bakery of the Queen's Hotel we have installed a fan blast burner in a Dutch oven and find that the gas bill is actually as small as their coal and charcoal bill was, and they are now able to turn out all their work in the day shift, whereas before using gas they had to operate two shifts, or night and day. This, however, is an unusual case, for as a rule gas for this class of work will cost much more than coal, coke or wood, but allowances must be made for saving in time, convenience, cleanliness, etc.

This is an all-gas hospital and will compare favorably with any hospital on the continent for equipment, service, etc. On each floor is installed a Decarie incinerator. In the various ward kitchens are small gas ranges toasters, etc.

We have done fairly well in the past three years in getting the large cooking jobs, and now have a large number of all-gas kitchens among the hotels, restaurants and institutions. In the past few years there have been close to 300 sections of hotel gas ranges installed here, and our gas sales for this class of business amount to over 200,000,000 cu. ft. per year.

Keep Your Eye on the Childs' Lunchrooms

Those who have Childs' lunchrooms in their city may be surprised some day to find gas burners placed in their present coal-fired ranges. I have seen these in operation and at first expected that a month or so would soon see them taken out, but I think anyone will be surprised at the results obtained and the smallness of the gas consumption. I personally, however, would prefer to see Stewart or some other make of gas range go in, especially on artificial gas.

Among the butchers, fish dealers and packers a good gas business can be had by the sale of butchers' furnaces or gas burners for them, by smokehouse equipment, etc., and a few installations only are needed to swing the others into line.

The large laundries as a rule are equipped with gas appliances to start with and don't require much attention, but the Chinese laundries, which are very numerous, offer a good field for the sale of gas appliances, such as iron heaters, water heaters, tank furnaces and dry-room equipment, which will give you a revenue on the sale of 30,000 cu. ft. or more per month each.

Coffee Roasting

In some cities large quantities of gas is used for coffee roasting, but the only large company here is still using hard coal, their business being governed by their general office in the States, and we have always been informed by them that they were still using hard coal there. We have a few small installations of this class of business, and there is no good reason why gas should not be used, as it has been proven to be as cheap, more convenient, cleaner, safer and cuts down shrinkage. We hope some day to land this job.

We have no gas engine business here except a few cases of small units, and on account of our distribution system it is probably a fortunate thing for us, as we would be bound to experience trouble. Ours being a combination company (this class of business is gone after for electric), and with very cheap power rates, it is not difficult to secure a good electric power load, and a steam motor power plant is now the exception to the rule in this vicinity.

Water Heaters Pay for Their Own Sale

Automatic gas water heaters are so well known to all gas men that they should need no special mention, but I am afraid that many companies lose sight of the possibilities which can be had through the sale of them. Almost any size company can afford to hire and keep one or more salesmen for this class of work only, and each and every man can more than make his salary, no matter what you pay him, on the profits derived from the sale only.

At the same time let us not lose sight of or forget the smaller industrial gas appliances such as soldering furnaces, brazing burners, barber shop heaters, which can be used for many purposes, even for generating steam, laundry appliances for institutions, glue cookers and heaters, tailors' equipment, etc., all kinds of gas burners for various purposes, as many times a small satisfactory job will lead to other and more important work. Whatever you do don't botch a job, no matter how small. Better to leave the job alone entirely than to start and only half finish it, as it will only get you in bad all around. Many times we are called upon to figure on jobs which are not good for gas, and if we can see no way of changing the equipment or requirements so that we know we can make good with gas, we have no hesitancy in telling the consumer so, and in most cases a frank answer is appreciated.

House Heating

The house heating business is something I have not done very much with up to the present time for many reasons. I believe in the auxiliary heating, and would like to see as much go on as possible, and we have a few cases where gas is used for exclusive heating during the entire winter, but most gas companies as a rule sell more gas in the winter months than in the summer, and unless their plant capacity is very flexible, that is, able to care for a varied demand at different seasons, and with coal gas plants this is difficult. It would look as though the cost of manufacturing and distributing this extra gas would amount to as much as some companies charge for it.

What Companies Can Afford an Industrial Man

We get many calls from people who claim to have discovered or invented some new system for house heating, and as a rule they want free gas, free connections or something else, but on investigation it is found that what they have has no merit whatever.

What I would like to see tried out sometimes, however, is a good gas hot water boiler with the smallest

size feed and return pipes used that is possible, and with radiator constructed of polished brass or hammered copper, so as to secure the greatest efficiency possible. The boiler, of course, would want to be controlled by an adjustable thermostat or automatic heat control device and placed on the return header of the boiler. Rapid circulation is what is wanted, and placing gas equipment in coal-fired boilers or connecting gas boilers onto existing feed and return lines handicaps the job at the start. Many will say that with such poor grades of coal as now received and at increased prices a more favorable comparison with gas can be made, but before jumping at conclusions be sure that the same number of B.t.u.'s are contained in the gas to-day.

Appliances, such as garage heaters, gas radiators, incinerators, water stills and sterilizers, special appliances for kitchen, and, in fact, all special gas equipment should be pushed to the greatest extent, for, as a rule, there is a fair profit in them and the gas consumption is always worth more than the ordinary customer.

Almost any size company can afford to have someone to work the industrial gas field, but in large cities, where a number of industrial men are needed in order to cover the territory, and where it is impossible to get trained men who can go out and figure on any and all kinds of industrial jobs, I believe it pays to get men who can grasp the meaning of things and pick up knowledge on certain lines. For instance, in the metal industries, take someone who wants to learn; show him where and how gas is used in this line of work, give him all the reading matter on the subject that he can handle in his spare time, and if he is any good he will be glad to do so. The N. C. G. A. industrial fuel pamphlets, the N. C. G. A. handbook, all gas trade journals and industrial appliance manufacturers' catalogues, all contain valuable information, and any man with an inclination towards this line of work can gradually fit himself by giving proper study and attention to them.

Also take him into as many factories that you can who are using gas for various purposes, as a live man will soon catch on, then turn him loose to hunt up prospects and give you all the information that he can. When you see that he has business in sight that looks reasonable, go with him to make sure that he is right, and help him if necessary to close the order, then let him see the job put in, tested out and turned over to the customer. You will find it won't be long before a man of this kind will be able to secure a large amount of business. It is usually better, of course, if you can take some one who has had some gas experience, but that is not always possible, although some companies advance their men to the industrial department from the shops or regular sales force, provided they show any prospects of development.

Must Have Fair Amount of Common Sense

For a number of years prior to five years ago many gas companies on the continent have had industrial gas departments, but in so many cases they were handicapped right at the start, as so few companies would give them the backing necessary or put the department on a real business basis with a proper showroom, etc. Happily this condition is being rapidly overcome nearly everywhere, and astonishing results are being secured where the industrial gas department is given any kind of a fair show.

I do not claim that an industrial gas man has to be all the great things which some write about, but I do think he must have a fair amount of common sense, good judgment, all the education possible and be able to meet any type of man without feeling at all embarrassed, and put up a good straightforward line of talk or argument, and know his own line of business as well as knowing something of his customer's line, so as to be able to tell the customer how and where he can use gas to advantage.

It must, however, be borne in mind that a man who can make a success as an industrial gas man has picked up considerable knowledge of many other lines of business, and unless you are paying him a fair salary he himself is very apt to be picked up by possibly companies with whom he has been doing gas business with. The gas industry has in the past five years lost more good industrial gas men than would be required to fill all vacancies to-day because of non-appreciation or misunderstanding of the results accomplished by their men.

If gas companies spent as much time, money and energy on industrial gas as some of them have on gas irons, they would all be better off to-day.

Only Common Justice That Gas Company Should Have Right to Demand That Piping Be Installed In Such Manner as to Establish Greatest Factor of Safety and Convenience

E. H. Caughell Wants Concerted Action on Part of Canadian Gas Companies Towards Standardizing Piping Methods

It may be assumed that all gas companies, or municipally owned gas departments, have certain rules and regulations respecting the installation of gas piping and the various gas appliances. The enforcement of these rules and regulations, however, is often extremely difficult, more particularly in the case of municipal control. It would therefore seem desirable that a definite code be adopted and administered by a central organization which could be assisted or backed up by Federal authority, declared E. H. Caughell in his paper before the recent annual convention of the Canadian Gas Association.

A Source of Continual Disagreement

Attempts to standardize methods without proper authority and without any attendant penalty for their violation is a waste of time and energy. Doubtless the lack of standard methods is largely responsible for the antagonism which unfortunately often exists between the plumbers and the gas company. In the case of smaller companies where no inspector is regularly employed it often happens that the company's representatives will demur at the connecting up of a service where he is well aware that the house piping has been badly or improperly installed. However, he has no alternative, and will very likely be met with the argument that business competition had forced the plumber's price to a point where he could not afford to use heavier than half-inch pipe, although knowing from the anticipated

use that nothing smaller than ¾-in. would render satisfactory service. The adoption of standard installation would at once overcome such difficulties, and result in better service to the consumer and happiness in the long-suffering complaint department.

So far as we are aware there has never been any concerted action on the part of Canadian gas companies for the adoption of standard practice in gas piping.

We believe, however, that the U. S. Bureau of Standards has started the movement by sending out a questionaire to various gas engineers throughout the United States with a view to securing data that will enable the bureau to formulate a code based on the composite opinions of these experts. This code may then be adopted by all gas companies, large and small, and will unquestionably prove of incalculable value to the gas industry in general.

It is only common justice that the gas company should have the right to demand that gas piping be installed in such a manner as to establish the greatest factor of safety and efficiency. On the other hand, the consumer should not be compelled to incur needless expense which will eventually accrue to the benefit of the company. However, as the company will always have certain responsibility in connection with the installation so long as service is being rendered, and naturally possess technical knowledge with respect to the matter, it would seem reasonable that the company should be the one to designate the size and manner of such installation.

Rules Should Be Reasonable

Rules and regulations to be effective should be reasonable and not inconsistent with good business methods. In the adoption of a standard code, therefore, great care should be exercised to eliminate any requirements that are not practiced by the gas companies' own fitters, but as correct methods are always consistent, there should be no difficulty in adopting a standard to the mutual advantage of the consumer and the company. In this connection it may be said that safety methods should be considered primarily as for the protection and benefit of the consumer, although the purpose and intent of regulations should be for good service, safety and general efficiency, which naturally will work out to the advantage of both consumer and company.

It may be argued that the company or department have matters entirely in their own hands, and may refuse to give service unless the piping has been properly installed and approved. Theoretically, this sounds all right, but in the case of municipal control, at any rate, it is not always workable. Practically it will work out something like this: Mr. Black, an influential citizen and heavy taxpayer, owns several houses, and one of his most desirable tenants has threatened to vacate unless gas piping is installed in the premises. Fearing that he may lose his tenant he consents, and without consultation with the gas department he goes to a plumber and instructs him to figure on piping the house for gas, at the same time reminding him that he wishes the work done as cheaply as possible. Having this in mind, the plumber learns in a general way from the tenant about how many openings will be required, and proceeds to figure on the work. The price being satisfactory, he secures the contract, and when the gas department finally receives an application for the gas service, and a man is despatched to set the meter, he will probably find:

1. That the riser is so located as to necessitate setting the meter in a most inconvenient place, and probably exposed to frost or dampness.

2. That the piping throughout is too small and entirely inadequate to give anything like a satisfactory service.

3. That the cellar lines are not properly supported, and will eventually develop valleys.

If the gas department refuses to introduce the gas under such conditions, the influential citizen appeals to the civic representative, and here's where the latter gets busy. Having been elected by the people to administer their affairs, he and his colleagues are virtually in control of the public utility, and issue instructions to the superintendent to carry out the wishes of the influential citizen. The result will be just what might be expected by any practical gas man. All this may be avoided by the adoption and rigid enforcement of specific rules and regulations governing such matters. In the first place, it should be made necessary and compulsory for the prospective gas consumer to obtain a permit for piping the house from a properly authorized inspector or official. Plumbing contractors should be furnished with copies of standardized rules, and when the work is finished, an inspection certificate issued to the gas company or department, authorizing the connection of the service. Penalties should be prescribed for the violation of any of the standard methods. There are many details to be worked out in the formulation of an ideal code. The establishment of an inspection department would doubtless arouse argument as to who should be responsible for the payment of inspector's fees. These matters might be left in the hands of a committee of practical gas men for recommendation to and final adoption by this association.

In a general way a standard code should embrace the following items:

1. Specifications for piping. This should include a table showing number of feet of pipe permitted, determined from number of outlets and capacity of pipe.
2. Size of pipe.
3. Location of wall entrances.
4. Minimum sizes for main runs.
5. Location of risers and relative position to meter.
6. Pressure test.
7. Appliance connections.

Doubtless other important requirements would suggest themselves in the working out of a universal standard, but in a general way the above rules cover the most important points, and the Canadian Gas Association would seem to be the natural medium through which to bring about desired results. In making these suggestions, the writer has in mind the conditions as they exist under municipal control, and it is quite possible that the scheme will not appeal so strongly to the management of private corporations. Obviously, however, standard methods are desirable in all lines of endeavor, as the general operation of kindred industries is the same the world over, irrespective of the system of management. We trust that this association will take the matter under consideration with a view to formulating a plan along the lines suggested, and which we feel assured would prove mutually advantageous to the gas industry and the user of the product.

AMERICAN GAS ENGINEERING JOURNAL

SIXTIETH YEAR

Published Weekly by
AMERICAN GAS LIGHT JOURNAL, INC.
42 Pine Street, New York, N. Y.

ELBERT P. CALLENDER, *President*
STANTON G. KRAKE, *Vice-President*
FREDERICK A. SOUTHWORTH, *Secy-Treas.*

EUGENE C. MILES, *Editor*

Subscription $3.00 per year, including postage in the United States, Mexico, Cuba, Porto Rico, Hawaii or the Philippines.
In Canada, $4.00 Foreign, $5.00
Single Copies, 10 Cents

WESTERN MANAGER
E. B. FRITZ

CHICAGO OFFICE
587 So. Dearborn St.

Entered at the Post Office, New York City, as Second Class Matter.

CONTENTS

THE BONUS SYSTEM AS APPLIED TO THE COLLECTION DEPARTMENT OF A PUBLIC UTILITY.... 193

MONTREAL COMPANY'S INDUSTRIAL GAS SALES FOR SHELL MANUFACTURING AT THE RATE OF 360,000,000 CU. FT. PER YEAR..... 199

EDITORIALS 204

MERCHANDISING GAS..... 208

NO STOPPAGE DUE TO WAR WORK OF COMMERCIAL DEPARTMENT RUN ON SELF-SUPPORTING BASIS 208

NEWS OF THE GAS INDUSTRY..... 209

Some Revelations Ahead, Perhaps, as to the Kind of Men Who Make the Best Salesmen

Extended draft ages or not, we are going to continue selling gas and gas-using appliances. To do less would be to fail in our mission of rendering public service.

But we are going to have various new experiences in the matter of salesmen—or maybe, in part, of saleswomen.

We are not going to be able to buy "pep" in our organizations, in that it is represented by youth. Our commercial departments are going to be compelled to seek out recruits, in a field they have hitherto thought contained no likely prospects, in the ranks of men beyond forty-five.

There are already within our salesmen ranks men beyond the age of forty-five, but they grew up in the business. We are going to be compelled to bring in greenhorns of these ages, and seek to break them in.

What is going to be the result? The JOURNAL throws up its hands. It isn't going to risk a prophecy. We are in for some interesting revelations. Will we find the older men, with their mature experience behind them, superior material to youths with little experience but enthusiasm undaunted by reverses and quicker learning power? Or are we going to find them, as most expect, a failure?

The Families at Home

We who are yet here, still discharging our regular tasks while others are fighting the battles, have our obligations to those fighters in providing them with comforts, conveniences and safeguards beyond the regulation welfare measures of the Government. We have likewise our obligations to the families they have left behind.

It is superfluous to say that no member of the family of any soldier or sailor should be permitted in the least degree to suffer want. It is true the Government makes provisions to avert this. But just now the Government is a vast, sorely tried machine. It is inevitable that in isolated cases it must be slow in getting around to discharging its functions and obligations. There is where we may stop in and tide the emergency over temporarily.

But our obligations go farther than merely providing material help. Each service flag in the window or on the doorway means lonely, anxious hearts within the house, hearts whose misery is tempered and concealed by pride, it is true, but heavy hearts nevertheless. We owe these people sympathy and moral support. We owe it to the men who are facing the bullets for us to lighten the burden for their families at home. It is our

duty to make them feel that we know and appreciate the value of their sacrifice to us.

It is not easy to live from day to day in the hourly expectancy of tidings that a husband, a father, a son or a brother has been mangled or killed, or stealthily, treacherously sunk and drowned. There are compensations though if the relative left behind has his or her knowledge that the loved one has suffered in good cause, fortified by the thought that we who benefit through his sacrifice realize our obligation towards them. After all, we Americans are only one great clan, one family of common interests and impulses. We didn't know it before the war, and we are learning it more fully each month that the war lasts. There are countless ways in which we can buoy up and help each other. Each means that we fail to grasp means a lost opportunity.

The Action of The Pacific Coast Gas Administration

The Pacific Coast Gas Association has postponed its scheduled annual convention as a war measure.

The AMERICAN GAS ENGINEERING JOURNAL a year ago, when the question of convention postponements was a live issue of national interest, set down completely and definitely its attitude on this question. It has nothing now to add.

But it is glad the Pacific Coast association has seen fit to postpone its convention for a reason that is apart from the general question of conventions.

The Pacific Coast association has accustomed us to live papers, bristling with interest and replete with new and valuable information. They have reflected invariably a spirit of optimism and push. To the jaded and discouraged they have come as an ocean breeze on a killingly sultry day.

Papers read at recent war-time conventions of the State and local associations have not impressed us as being up to the standard of the papers at previous meetings in normal times. There has seemed to emanate from them an atmosphere of "I've been called upon to prepare this paper, but really there is not much I have to say." And what followed generally bore out and confirmed the thought. Speakers who a year ago were the personification of optimistic outlook have given voice to utterances that would seem to stamp them as actually despondent in regard to the future of a branch of gas company activity in the possibilities of which they had cherished almost fanatical faith.

A tired-out, jaded man cannot be expected to be an optimist. Neither can one expect a man whose outlook has been broadened out and accustomed to vast problems and enterprises to concentrate his thoughts upon the discussion of a relatively petty proposition.

We believe these facts are the reason for the distinct depreciation in quality so noticeable in recent association convention papers. All of us are working harder than we ever worked before. We exist more or less continually in a state of "near fag." It is possible—in fact, a necessity—that we keep ourselves spurred up sufficiently to discharge our direct tasks. But when someone asks us to take on something additional that is in no way connected with our own company's affairs, in which we do not recognize a commensurate public service, our brain and our interest simply refuse to work. And our interests of yesterday are to-day temporarily submerged.

A year ago, the man who felt all through his system that the big field for gas remains in the lighting was alarmed and driven almost to desperation by the growing sentiment for industrial business. In his mind's eye he saw the industry, enraptured by the new possibility, rushing blindly, headlong into its lap, leaving a field of tried and proved value behind it to be captured without struggle by any competitor willing to make the effort. Naturally this man fought to avert the catastrophe. His papers held us because his phrases were body blows straight from the shoulder.

To-day no field of sales is threatened. No competition is to be feared. The war has made the gas industry a preferred industry. There are no battles against seemingly hopeless odds to be waged. Consequently, we are not "all pepped up" when we sit down to write a convention paper.

Perhaps had the Pacific Coast Gas Association held its scheduled convention its papers would have, as usual, been up to the previous excellent standard. But a study of the papers at other recent local conventions would not seem to indicate that such could be possible. And tiresome, spineless, valueless papers coming from this live group would have been, indeed, a disappointment.

Sales Already Three Quarters Made

There are many stalwart householders very much worried at the present time. Winter is approaching and there is no coal in the cellar.

They were told to order early, and they did—some as long as three months ago. But the coal is not yet delivered.

They are confident that it will be in ample time—so confident that the majority wouldn't listen to a proposition for a complete gas-fired heating installation, though a proportion of the vast group, of course, would. But when you speak of auxiliaries you will find them receptive—a heater here and there strategically placed so if that unbelievable contingency—no coal—should happen they could still exist in reasonable comfort even if they could not have the entire house warm.

This would be an insurance that could be bought at no excessive cost. The prospect might deem the risk very slight indeed, yet be ready and eager to purchase a sure thing at so reasonable a cost. And once bought we can be sure that heaters will be used. This room or that will feel chilly before others—the very room in which a heater has been placed if the gas man has exercised reasonable judgment.

There will be no thought of starting the central heating plant in the householder's mind to relieve so slight a discomfort. A ready means will be at hand. He will light one of the gas heaters.

Some of the heat will, of course, travel to other rooms. It will be weeks later than when the householder usually starts his furnace before he will feel impelled by discomfort to start it, if he is thus equipped with gas heaters. A few such heaters in any house, however large, will keep it comfortable for a greater proportion of the winter than any layman will believe until he is convinced by actual experience.

Now is the time to get those heaters in. The prospects are already three-quarters sold. When the coal comes it will be a different proposition. Sell them now. You will be putting good business on your company's lines and you will be rendering the nation a service in that the coal you will use to furnish the gas will in nowise equal the amount that will in consequence remain unused in the consumer's premises.

Wants Committee Devoted to Vigorous Pushing of Development of Gas Industry

(*Continued from page* 198)

is given to the fact that this same electricity used as motive power would do, in many cases, 50 and 100 per cent more efficient and useful work.

I believe almost all coals should be utilized in some form or other in the manufacture of gas and the proper solution of the heating and fuel problems of our country within the next few years will be in this direction if the country is to be saved from a very serious fuel famine.

A Gas Plant in Improper Hands

If there were more gas plants scattered throughout our great country, especially among the larger cities, it would result in a great deal of fuel saving, and it would pay those cities which already have gas plants to spend more money for extensions and for the development of new business. I am sure the result would more than offset the financial obligations involved. It would be a surprise to the people of many of our smaller gas towns if the gas were shut off suddenly and they were forced to purchase coal or electricity to make up for the loss. They would then find out that the gas company could more efficiently use the coal than could the people do so in getting the same results.

A gas plant in proper hands and kept in an up-to-date condition becomes an asset that no city or town would ever think of doing without.

The editor of the Belleville *Ontario* newspaper stated in a recent editorial that there were gas plants in Cobourg, Napanee and other towns "that may be acquired, we have reason to believe, for nothing by any person of financial responsibility who will agree to operate them." I had the pleasure of answering many of the points pertaining to the Belleville gas situation which were brought out by the editor of the *Ontario*, and I stated in reply that the gas plants at Cobourg, Napanee and other cities with like conditions could not expect to be worth anything so long as those controlling the situation in these towns (as in these instances the Hydro-Electric Department) were allowed to manage the affairs. For it stands to reason that if these business men have nothing before their vision but electricity they could not expect to see any good in the gas plant. I venture to say that these same gas plants in the hands of independent and go-ahead men would very soon need to be enlarged to take care of the demands for gas that would be created. The editor of the Belleville *Ontario*, in his editorial, even went so far as to suggest to the special committee formed to investigate the local Belleville gas situation to debate the question, "Resolved, that the city gas plant should be abolished."

It is this kind of thing that we gas men have to contend with, and when such things do appear in the local press we should be ready and willing to take the matter up and discuss it on its merits.

The United States Fuel Administration in recent published advertisements advised the people to use gas wherever possible for cooking and heating purposes.

The Advisory Council on Industrial and Scientific Research for Canada, has been doing good research work throughout Canada, although handicapped through lack of efficient assistance, in an endeavor to solve some of the pressing problems of the day. In a paper read before the Canadian Manufacturers' Association meeting recently held in Montreal, Prof. A. B. McCallum says that they have given a grant for the making of straw gas on the Western plains. He says "there is somewhere between twenty and thirty million tons of straw from the wheat fields of Alberta and Saskatchewan that are wasted every year. Sometimes in September and October one sees the sky line ablaze with burning straw."

Gas from Lignite

"That straw," he tells us, "is an organic product that ought to be used," and it was proposed by Professor McCallum and some others of the University of Saskatchewan that it should be used for fuel or for the making of gas to be used on the farm homesteads. He says: "A grant has been made for that purpose, but we have not reached any results yet, because it has been impossible to get the steel required for the demonstration plant that we propose to install on the farm. It has been done; this proposal has already been undertaken, and so at least there has been partially demonstrated the utility of it, and we propose to have it demonstrated commercially. If we succeed, every farmhouse in Saskatchewan and Alberta may, for a small sum, $300 or $500, have a gas plant which can furnish it with gas for heating and lighting purposes throughout the year."

I mention Professor McCallum's remarks on straw gas just to show that we can get gas from almost anything, and if all the men throughout the country interested in the development of gas, no matter what kind of gas it may be, were members of this association, I feel sure we could make great progress as an industry.

Mr. Waddie, of the Canadian Manufacturers' Association, in discussing the fuel situation at the Canadian Manufacturers' Association meeting, stated, in part: "Now we hear a good deal of reference made to peat, and to lignite, and I just want to say one word in that connection, because I happen to have had connection with a lignite proposition a good many years ago—I think twenty years ago—and it was in Bohemia. I happened to be assistant manager of a plant in Bohemia in the north of Austria, where we had the lignite plant; that is, we dug lignite out of the side of the hill and brought it down, and we found this lignite, of which we have vast beds in Canada, was wonderful for the purpose of making producer gas. It is a large plant; it is a plant that is working against us now in foreign countries, and working against us hard. This plant is run entirely by gas, which is produced from lignite. All their heating and everything was done by producer gas produced from lignite. I may say it is a large steel plant."

The writer's own opinion regarding the solution of the fuel problem for the future can be stated in a few words, as follows: "Wood fuel should only be used by the people in closest proximity to the source of supply, and that no coal be allowed to be shipped to centers where there is an abundant wood supply. Coal, especially bituminous coal, brought into the country, as well as that mined in the country, should be turned over to gas manufacturing companies or coke oven plants, and the gas content released and sold in such centers and towns where it is not convenient to get a coal or wood supply. The gas could also be distributed in as large an area as possible for domestic, industrial and other heating purposes at a low price, while the coke would be sold in centers not conveniently situated to the coal, wood or gas supply, as well as being utilized in metallurgical, foundry and smelter operations, and, if necessary, for the generation of steam power in our industries. Peat fuel, as brought out before, can best be utilized for producing gas and this gas sold for heating purposes.

Importance of the Individual

An editorial in the July 20 issue of *Scientific American* says, in part: "We are told that ships will win the war, that food will win the war, that coal will win the war. So will they if they get a chance. The ships, food, coal and all inanimat and impersonal, and the only way in which they can be put to work for the winning of the war or the achievement of any other purpose, is by the hands of man. It is only through the agency of human labor that ships or food or coal can be produced or used; so when we come right down to rock bottom, it is individual effort that is going to win the war, and nothing else.

"Non-existent is the man whose individual efforts have no bearing upon either the production or the use of some necessity of war, for at the very least, we all eat, and eating consumes food, and food is one of the very biggest potential agents of victory. So it behooves every individual to put forth every possible effort to place production safely ahead of consumption.

"Some can do more than others, for some hold positions of more responsibility than others. We are all too wont to ask, What is the use of saving a shovelful of coal when another can save a ton? or What is the use of unloading a single car of coal earlier when we see whole trains remaining unmoved for days at a time? or What is the use of keeping a handful of food out of the garbage barrel when whole shipments of fruit go bad through somebody's negligence? or What is the use of cultivating this tiny patch here when that large one over there is held unproductive through shiftlessness or absentee ownership? In every case is the answer that, 'A big wrong and a little one does not make a right,' but rather combines to make a bigger wrong. The use of saving a shovelful of coal is that shovelful; the business of the man with the shovel is to save his shovelful, not to worry what the other fellow is doing with his tons of coal."

Our best national effort is the sum total of our individual efforts. The man who measures his effort up with that of some one else is not giving his own best effort, and until he sees the errors of his ways and mends them our national effort is not a maximum. Every little bit added to production or withheld from consumption is an object in itself. The individual effort that will win the war is the individual effort of every American.

So, you see, applying the principle to the development of the gas industry, by being careful of the little things, and doing them right, as we go on from day to day, the bigger things will be able to take care of themselves. For it is well said that "trifles make perfection, but perfection is no trifle." We can all do something, little though the individual effort may be in itself, to help along the gas industry in which we are engaged. The future will only bring to use what we put into it to-day.

Stopping Belt Slip with Cutting Edges

(Copyright, 1918, by W. F. Schaphorst.)

In a little discourse on belts and pulleys and belt slip I heard an interesting account a short time ago that I believe is worth chronicling.

A certain belt man, who was called "Stubborn," decided that he could stop the slip of a leather belt in his charge by making the pulleys rough. Comrades advised against it, but he headstrongly procured a chisel and nicked the cast-iron pulleys all around so that they were indeed rough. His treatment seemed to have the desired effect for a while, and he completely ignored his fellow workers for a time. He looked on them aloof. In one week, though, the belt that was once a good leather belt was all chewed to pieces. It had to be replaced. The pulleys, also, had to be replaced.

If there is any slip in a belt it is best not to have any cutting edges on the pulleys, and even if there is no slip there is creep, and creep itself would destroy the belt in time. It was declared by the narrator of the above that by the end of the week the pulleys had already been worn down considerably smoother, and another belt would perhaps have smoothed the pulleys back to their normal condition, but it was decided that the method was too expensive.

No Stoppage Due to War in Work of Commercial Department Run on Self-Supporting Basis

W. B. Johnson Believes Every Dollar Earned by Such Department Should Be Spent for Promotion of Business and Obtaining Good Will of Public

To continue or discontinue all commercial work was a question that confronted most managers of gas properties on the outbreak of the present world struggle, declared W. B. Johnson, new business manager of the Montreal Light, Heat & Power Company, in his paper before the recent annual convention of the Canadian Gas Association. If continued, what was to be the policy of the company and what changes were necessary?

I am proud and glad to say that due to the policy adopted by our management years ago, we have not found it necessary nor advisable to change that policy since that time, due to the fact that we were running the department on a sound merchandising basis.

The Working Basis

We have been working for years on the principle that the commercial or new business department of a gas company should be self-supporting, and I am glad to see so many companies are now seeing the wisdom of this policy, and adopting same, although they formerly ridiculed the idea. There can be no question but that a commercial department of a straight gas company could not only be self-supporting, but could show a surplus to be used for general publicity or good-will promotion work.

I believe that every dollar earned by the commercial department should be spent for the promotion of the business and the obtaining of the good will of the public.

In the adoption and carrying out of such a policy, there are many things that must be considered and which are governed by local conditions. The methods followed by one company may not prove successful in another city, so that local conditions should be studied carefully before adopting new methods or systems.

Difficulties Peculiar to Situation

I believe that we have had as many, if not more, of the difficult problems to contend with than most companies, and will enumerate a few of them:

1. We are a combination company and have had the keenest of competition to deal with, so that fully 75 per cent of our energy has had to be devoted to the securing of electric contracts, from which the commercial department receives no direct credit.

2. Fully 80 per cent of the people of Montreal are French speaking, so that we cannot engage salesmen on their selling ability, but must secure such as can speak both languages. The securing of desirable French-speaking salesmen is a far harder proposition than one would suppose.

3. On account of the present leasing laws practically all moving is done during the first three days of May, which means we cannot keep up with our regular work during the last half of April and first half of May, but must devote our time in taking care of those who are moving. This May moving also prevents us from adopting the method of paying our salesmen as we would like to, and which, under ordinary conditions, would be far more advantageous to us.

4. Until quite recently there were no by-laws in effect regarding interior piping, and it is quite common to find ½-in. risers supplying two flats, and very common to find ¾-in. risers supplying three flats. This, of course, greatly interferes with the sale of both ranges and water heaters as well as the gas sales.

5. So many of the flats are built with no provisions for heating except from the kitchen range and a Quebec heater placed in the front hall, and these are supposed to heat the entire flat. There are any number of flats that obtain all their heat from the kitchen range.

6. The utilization of the bathtub as a storage for coal or vegetables may sound ridiculous, but is something that we run across very often. Quite a large percentage of bathrooms have no provision made for hot water, and it is an expensive proposition to install concealed piping from kitchen to bath.

We are firm believers in branch offices and showroms, as you will readily see by our new uptown power building, which we have recently opened; the fixed charges on this branch amount to approximately $25,000 per annum.

Branch Offices Pay Their Way

While these branch offices are opened for the "convenience of our customers" for the payment of bills and the application of gas and electric service, they must show enough profit on appliances sold to not only be self-supporting, but leave a surplus to apply to other expenses of the new business department.

Since opening our new store we have added to our lines of neutral goods. We do not, however, handle anything but allied lines, such as pyrex glassware, aluminum cooking utensils, casseroles, percolators and

(*Continued on page* 212)

NEWS OF THE GAS INDUSTRY

Canadian Gas Association Holds a Most Successful War-time Convention

Important Part Gas Plays toward Carrying on the War Discussed—Many Valuable Papers Read

J. M. H. YOUNG

GROUP WHICH INCLUDES LEIGH WICKHAM, J. S. NORRIS, VERNON BAKER, ARTHUR HEWITT, H. E. MANN, R. A. WALLACE, A. B. LAMBE, A. A. DION AND C. E. FORSTALL

A. A. DION

The eleventh annual meeting of the Canadian Gas Association, held in the Windsor Hotel, Thursday and Friday, Aug. 22 and 23, 1918, was one of the most successful meetings ever held.

There was a record crowd, too. They came from the far east and the far west, the north and south, and the association's American friends were not lacking in helping to make the proceedings a grand success, for they were there in goodly numbers. Sixty or seventy delegates arrived by boat, having had a most delightful trip of a day and a half's duration down Lake Ontario and through the Thousand Islands and Rapids of the St. Lawrence. The time these delegates had together on their journey down was a real convention in itself, and those responsible for the arrangements all through are to be congratulated on the success of the whole proceedings.

Canada has been four years at war, has sent hundreds of thousands of men overseas to fight the battles of freedom, yet the Canadian Gas Association has seen fit to carry its conventions on as ever, but only in a patriotic and beneficial way.

The members of the executive commitee have wisely considered the gas industry to be too important an industry to even think of doing without an annual convention, for it was only such meetings, and especially a meeting like the one just concluded, that reveal to us how necessary the gas industry is to the nation—war-time and all the time.

There was a good attendance at the opening of the convention, which was held in the Ladies' Ordinary, at 10 o'clock Thursday morning, when the delegates were welcomed by the president, Mr. J. M. H. Young, who was succeeded by Mr. J. S. Norris, of the Montreal Light, Heat & Power Company, who, on behalf of the Montreal members, extended a cordial welcome to the association on its visit to Montreal. Mr. Norris regretted that the Mayor was not present with the keys of the city, but assured the delegates that the keys of the light, heat and power company would make all the members welcome.

President J. M. H. Young also presented an interesting paper written by his father on "The Experiences of Robert Young in His Early Days in the Gas Business."

One of the most interesting papers presented at the Thursday sessions was that given by Mr. C. D. Slimpin, industrial engineer of the Montreal

G. W. ALLEN

Light, Heat & Power Company in which which the use of gas, and the opportunities awaiting its development, not only in times of peace, but of war was discussed. For it must be remembered that the papers read and discussed at these sessions all wore a war-time aspect.

Mr. Slimpin dealt with the ordinary trials that beset gas men in the work of advancing their business in peace times, and with the manner in which gas as a fuel and power agent had been used in connection with war supplies. His company, he said, had been given an opportunity to prove the usefulness of gas in the manufacture of shells, with such success that from working with one company their enterprise had spread to many others to such extent that they had sold over half a million dollars' worth of gas in this work already, while their sales of gas to-day amounted to about 360,000,000 cu. ft. a year.

One shell plant turning out 75 millimeter shells used gas for its entire work, using 10,000,000 cu. ft. of gas a month turning out 7,000 shells per day, later to be increased to 10,000 per day. In this way Canadian gas was being used as an offset to German poison gas, with excellent results.

Mr. Slimpin also pointed out numerous methods by which the use of gas as a fuel and power supply was being used in Montreal for all sorts of purposes, from the manufacture of high explosives and shrapnel shells to cooking and the heating of houses. He pointed out the many manners in which gas could be applied to progress in industrial, war and other work, and ended with much wholesome advice as to the proper recognition of the men who were using their brains to spread the propaganda of gas as an aid to civilization.

Mr. Slimpin's paper was well received by all present, and several, including H. E. G. Watson, Arthur Hewitt, of Toronto, Mr. Wallace, of Quebec, and Mr. Dion of Ottawa, took part in the discussion. A hearty vote of thanks was tendered Mr. Slimpin for his valuable paper.

The nominating committee selected to bring in recommendations for office bearers and executive members for the year 1918-1919, having previously retired, re-entered the room at this juncture and announced the names of the following gentlemen as office bearers for the ensuing year: President, C. C. Folger, general manager Keystone Light and Power Department, Kitchener, Ont.; vice-president, V. S. McIntyre, superintendent Kitchener Light and Power Department, Kitchener, Ont.; second vice-president, C. S. Bogg, secretary-treasurer Montreal Light, Heat & Power Company, Montreal; secretary-treasurer, George W. Allen, advertising manager Consumers' Gas Company of Toronto.

The following gentlemen were chosen as members of the executive committee: Arthur Hewitt, Toronto, Ont.; J. M. H. Young, London, Ont.; J. S. Norris, Montreal, Ont.; E. H. Caughell, St. Thomas, Ont.; J. P. King, Stratford, Ont.; A. A. Dion, Ottawa, Ont.

The president's report and the executive committee's report were read by retiring President J. M. Young, and the secretary-treasurer's report was read by the secretary, George W. Allen. The financial statement showed the association to be in a flourishing condition. Formal motions that these reports be passed were made and adopted.

An interesting feature of the Thursday sessions was the presence of two of the best known gas men in the United States, Messrs. E. N. Wrightington, who brought greeting from the American Gas Association of the United States, and Alfred E. Forstall, last president of the American Gas Institute. These gentlemen were greeted by Mr. Arthur Hewitt, and enthusiastically received by the members present. Interesting remarks were made by the two American representatives, who praised the Canadian Gas Association and tendered their invitation to all Canadian gas men to join the American Gas Association.

"In view of late events," Mr. Wrightington said, "the term 'American' has ceased to have its former narrow sense with which we were wont to use it, as applying only to the United States, the American Gas Association means to include all of North America, especially Canada, as well as the continent of South America, if they wish to come in later."

LEIGH WICKHAM AND A. E. FORSTALL

Mr. Arthur Hewitt, of Toronto, read a paper entitled "The Calorific Standard for Town Gas." In his paper Mr. Hewitt endeavored to show the vital need for a lower calorific gas standard throughout Canada. Following the discussion of the subject, the committee was authorized to prepare a memorial for presentation to the Canadian Government, asking for an amendment of the gas act, fixing the minimum standard at 460 or 480 B.t.u.

In answer to the question as to whether the fixing of this standard would entail a decrease in price of the gas, Mr. Hewitt replied that increased expenditure made this unlikely, but that if a lower minimum standard was not fixed, increased rates for gas would result.

Another interesting and very valuable paper read was entitled "Pensions for Old Employees," by C. S. Bogg, secretary-treasurer of the Montreal Light, Heat & Power Company. This paper showed how the Montreal company cared for and looked after its employees who had served fifteen or more years with the company. The plan was shown in detail, and is one which might very easily be adopted by many other companies.

During the afternoon of Thursday, Aug. 22, the member delegates enjoyed a visit to the La Salle Gas Works, while the ladies were treated ot a very enjoyable sightseeing trip.

The evening was given over to a supper and cabaret entertainment in the Rose Room at the Windsor Hotel.

The Friday sessions were taken up with the reading of other valuable papers, including the following:

"The Commercial Department of a Gas Company in War Time," by W. B. Johnston, new business manager Montreal Light, Heat & Power Company; "Standardization and Inspection of Piping Installations," by E. H. Canghell, manager light and power department, St. Thomas, Ont.; "Possibilities Ahead of the Gas Industry," by George W. Allen, advertising manager Consumers Gas Company, Toronto, Ont.

Mr. Johnston's paper was full of news for commercial men, and opened up much discussion. Those who took part in this included Messrs. E. N. Martin, Des Moines, Iowa; H. E. G Watson, Toronto; H. L. Schutt, Buffalo; Arthur Hewitt, Toronto; R. A. Wallace, Quebec; N. E. Gerry, Toronto; Harry Dains, West Collingswood, N. J.; F. Elcock, Ottawa; V. S. McIntyre, Kitchener, Ont., and Edwin Newsome, Toronto.

Mr. Caughell's paper brought out some excellent features regarding the inspection of gas piping in buildings, and strongly advocated the association taking active steps towards drawing up specifications which could be recommended as standards of practice to the authorities in many municipalities who were about to pass by-laws governing such work. This paper was discussed by Messrs. C Grace, Hamilton, Ont.; A. E. Forstall, New York; G. W. Allen, Toronto; R. A. Wallace, Quebec; E. A. Dion, Ottawa, Ont.; Arthur Hewitt and E. Newsome, Toronto, and J. J. Heeg, Guelph, Ont.

Mr. George W. Allen's paper, on the "Future Possibilities of the Gas Industry," evoked much favorable comment, and helped to create greater confidence in the gas business. It is a paper every gas man should read, especially those who have their confidence in the business somewhat shaken. Mr. Allen's paper is founded on a general resume of the gas industry. Messrs. Dion, McIntyre, Doins, Wallace and others took part in the discussion.

After the reading of numerous communications the new president, C. C. Folger, was requested to come forward to take the chair, whilst the retiring president handed over the office to him.

President Folger thanked the association for its confidence in him by electing him president, and hoped the year to come would tell whether he could fulfill the position to the satisfaction of the members. He gave great praise, as well as did retiring President Young, to the great work the secretary-treasurer, G. W. Allen, was doing and had done for the good of the association and the industry generally. There being no further business the meeting adjourned.

On Saturday, Aug. 24, quite a number of the members who had come down by boat from Western points embarked again for the return two-day trip. All reservations were in the charge of Secretary Allen.

Thermophore Manufacturing Company Files Bankruptcy

The Thermophore Manufacturing Company has filed a petition in bankruptcy with the United States District Court, Grand Rapids, Mich., and has asked for the appointment of a trustee. The petition lists the liabilities at $47,935.16 and the assets at $34,471.98.

This concern was organized in Kalamazoo in 1916 for the manufacture of gas appliances. About a year ago the company expanded and leased one of the buildings of the States Motor Car Company. It was physically well equipped, but it is understood that internal difficulties have arisen that interfered with the success of the enterprise.

The officers are Harry den Bleyker, president; E. B. Desenberg, vice-president; Ellis R. Lewis, secretary; James M. Gilchrist, treasurer.

Fire Damages Empire Gas Company

Fire following an explosion at the plant of the Empire Coke Company in Borden City, near Geneva, N. Y., recently caused a loss estimated at upwards of $150,000. The company supplies gas to Geneva, Auburn, Seneca Falls and other nearby towns.

Old Colony Gas Company Has Hearings on Increased Gas Rates

The selectmen have been holding conferences with the officials of the Old Colony Gas Company, Braintree, Mass., in regard to the recent increase in the price to $1.80. The hearings are to be continued until some definite conclusion can be arrived at, but it is not expected that there will be any material reduction in the price to the consumer.

It is understood that the same question has been debated by the towns in which the company provides the gas, and that there has been no material reduction in the price. Some of the officials state that the people are lucky to have gas at any price under the existing conditions.

Wisconsin Public Service Company Granted Increase

New Rates to Be Effective Immediately

The Wisconsin Railroad Commission has granted the petition of the Wisconsin Public Service Company, of Green Bay, Wis., to permit it to increase its rates. The decision was handed down recently.

The new prices will be 20 cents over the previous rates for every 1,000 cu. ft. of gas used per month.

The new rates are subject to change by the commission as soon as it considers such a change advisable or necessary. The ruling is intended primarily to take care of the temporary rise in the cost of production. De Pere and Green Bay are the only cities affected by the increase.

The changes will be as follows:

	Cubic Feet	New Rate (Net)	Old Rate (Net)
First ..	1,000	$1.35	$1.15
Second.	1,000	1.25	1.05
Next ..	3,000	1.15	0.95
Next ..	10,000	1.10	0.90
Next ..	20,000	1.05	0.85
Next ..	65,000	1.00	...

The new rates go into effect at once.

To Investigate Affairs of Alabama Company

The affairs of the North Alabama Gas Company, which is under contract with the city of Florence to supply gas there, are to be investigated by the Alabama Public Service Commission.

This course was agreed upon recently when a request of the company for permission to increase its maximum rate per 1,000 ft. to $2 was before the city commission. The motion that the public service commission be asked to assist in deciding upon the reasonableness of this request was made by Major Striplin and agreed to by Commissioner Jordan.

Judge John L. Hughston, T. M. Rogers and David Holt appeared before the city commission in opposition to the proposed increase, which was asked for during the continuation of the war, the present maximum being $1.50 per 1,000 ft., which the opposing citizens argued is a very high rate, to begin with.

No Stoppage Due to War, in Work of Commercial Department Run on Self-Supporting Basis

(*Continued from page* 208)

teapots for gas ranges, etc.

We, like most other companies, have lost considerable gas business to the electric due to the fact that we have not carried a suitable line of coffee percolators, etc., for gas ranges.

There is no question but that the electric percolator has been the means of converting a great many people to the use of electricity for various purposes.

The securing of goods and the steady increase in prices has been a great hindrance to the commercial departments, but we must keep our stocks complete and keep increasing our selling prices to keep pace with our increased costs.

People nowadays expect to pay more for all appliances than they formerly did, and the increased prices are easily justified.

At the present prices of gas no company can afford to sell any appliance at less than cost, which should include not only the cost of the article, but the total selling and installation costs plus overhead expenses.

Bangor Gas Company Submits New Schedule of Rates

The Bangor (Me.) Gas Light Company recently filed with the public utilities commission a revised schedule of gas rates which, effective Sept. 15, 1918, propose the following rates:

First 5,000 cu. ft. at $2 per 1,000 cu. ft.

Second 5,000 cu. ft. at $1.90 per 1,000 cu. ft.

Next 10,000 cu. ft. at $1.80 per 1,000 cu. ft.

Next 20,000 cu. ft. at $1.70 per 1,000 cu. ft.

Over 40,000 cu. ft. at $1.50 per 1,000 cu. ft.

Minimum charge 50 cents per month.

The above rates are subject to a discount of 10 cents per 1,000 ft. if bills are paid on or before the tenth of the month following that in which gas was used.

Prepayment meters are set to deliver 130 cu. ft. of gas for 25 cents.

The present rates established May 10, 1917, are as follows:

First 5,000 cu. ft. at $1.75 per 1,000 cu. ft.

Second 5,000 cu. ft. at $1.65 per 1,000 cu. ft.

Next 10,000 cu. ft. at $1.45 per 1,000 cu. ft.

Next 20,000 cu. ft. at $1.45 per 1,000 cu. ft.

Over 40,000 cu. ft. at $1.25 per 1,000 cu. ft.

Minimum charge 25 cents per month.

The present rates are subject to a discount of 10 cents per 1,000 cu. ft. if bills are paid within the discount period. The present prepayment meter delivers 140 cu. ft. for 25 cents.

Louisville Company Asks Permission to Mix Artificial and Natural Gas

Erasmus Haworth, of Lawrence, Kan., recently employed by the city to investigate the supply of natural gas in the fields of West Virginia and east Kentucky in an effort to prove the truth or falsity of the report submitted by the Louisville (Ky.) Gas & Electric Company, left there recently to take up his duties

The gas company, in a voluminous report on the gas situation, declared the supply was fast dwindling, and requested that the city give it permission to mix with the natural flow enough artificial gas to meet the winter demand. Although the city has made no official reply as yet to the request, it is understood that upon the report of Mr. Haworth within the next ten days or two weeks will hinge the future rate for gas in Louisville.

Mr. Haworth, who has spent many years in the oil and gas fields of the South and Middle West, will make an exhaustive study of the situation, and, if possible, find if there are still some undeveloped fields from which the Louisville company may draw on to increase its supply.

Safety Council of St. Louis Will Meet Sept. 1

Meeting Called Earlier than Scheduled by U. S. Treasury Department

The Public Utilities Section of the seventh annual convention of the National Safety Council will meet at the Statler Hotel in St. Louis, Wednesday, Sept. 18, according to the program of the convention issued last week by Carl L. Smith, secretary of the Central Mississippi Valley Division of the council at St. Louis.

This session will be devoted to a discussion of the causes and prevention of accidents in gas plants, accidents in homes and factories in which gas is involved, and accidents resulting from the operation of other utilities.

The convention of the Safety Council proper, which originally was scheduled for the week of Sept. 30, has been advanced two weeks at the request of the Treasury Department. Most of the safety engineers who are delegates to the convention are also leaders in the Liberty Loan work at their respective plants, and the council readily acceded to the Treasury Department's request that the convention be finished in time to permit the engineers to be at their plants when the Fourth Liberty Loan campaign is launched.

The Chemical Section of the council, in which gas men also are interested, will meet Sept. 17. Three entire floors of the Statler have been obtained for this exhibition of safety appliances for industrial plants.

Charles Town Gas and Water Company for Sale

The Charles Town (W. Va.) Gas and Water Company, which has been in the hands of a receiver for about a year and a half, is to be sold Sept. 13 by Stewart W. Walker, special commissioner, at public auction. The same parties own the Martinsburg plant, and this is to be sold also. The plants were purchased by a New Jersey plant several years ago and extensive improvements have been been made since they were purchased.

Increase In Binghamton Rates Opposed

The Binghamton (N. Y.) Gas Works, which is requesting a 20 per cent increase in the price of gas, already has encountered opposition from gas consumers.

The matter came before the common council recently in the form of a remonstrance signed by more than 100 persons, who are gas consumers in that city, protesting against this increase or any other increase in the price of gas at this time. The communication called upon the aldermen to stand by their constituents in this matter and prevent a further rise in gas rates and appealed to the public service commission to refuse the request.

A resolution was passed by the council directing the corporation counsel to communicate with the public service commission and a request that a hearing be given before the gas rates increase becomes effective on Sept. 1, and that he appear before the commission in behalf of the citizens to oppose the increase.

THE LEGAL TENDER OIL & GAS COMPANY, to deal in and with oil and gas lands and to develop same; $250,000. Samuel C. Wood, A. D. Suess, Chicago, Ill.; L. B. Phillips, Dover, Del.

Big Pipe Line Under Construction by Southern Counties Gas Company

Work is now actively under way in constructing the 8-in. pipe line which the Southern Counties Gas Company, Los Angeles, Cal., is building from Long Beach to Terminal Island.

The new line involves the laying of 33,000 ft. of iron pipe, and will supply not only the shipbuilding plant, but the entire island. The pipe is now being welded, and President Bain of the Southern Counties company, anticipates that it will be completed in from fifteen to twenty days.

THE LACLEDE (MO.) GAS & LIGHT COMPANY will increase the common stock from $17,500,000 to $37,500,000, and also increase the bonded indebtedness from the present $20,000,000 to an amount not in excess of the capital stock.

Government Issues Loan to Union Gas & Electric

The Union Gas & Electric Company, Cincinnati, Ohio, will be loaned $2,000,000 by the Government for construction of a third unit and the new generating plant. A transmission line from the plant to the new nitrate plant at Broadwell will be built also.

Gas Plant in Indiana Given Permission by State Fuel Administration to Store Coal

The Indiana State Fuel Administration has just issued a ruling, or a modification of a former ruling, which will allow gas and other coal by-product plants in Indiana to store a supply of gas coal or by-product coal sufficient to meet requirements for sixty days. The same rule will apply to similar plants in Illinois and Missouri, the ruling said. The storage ruling has just been promulgated to the State Administration by the Federal Fuel Administration. The ruling will affect Indiana gas plants materially wherever the by-product process or the coal gas process is in use.

Steam coal can be stored at plants in the State for thirty days only, the State Administration of Fuel problems has announced, after an examination of the Federal ruling.

Charles G. Hall, of Terre Haute, district representative of the Fuel Administration, after it was announced that the Federal Administration, in its storage ruling, provided that in Indiana the storage limitations should be decided by officials of the State Administration, decided that thirty days' supply of steam coal is sufficient for any Indiana plant to have on hand, because at this time no great difficulty in obtaining the coal has developed. In this ruling Mr. Hall was sustained by Alex R. Holiday, assistant State fuel director. Until the Federal Administration's ruling was announced gas coal was included in the thirty-day limit ruling that applies to steam coal storage in the State. Now owners of gas plants and certain steel and glass plants, where by-products of coal are manufactured, will be permitted to store a sixty-day supply of coal if they wish to do so. By-products industries, not on the War board's preferred list, will be permitted to store no gas coal.

The storage ruling was announced to the State Administration officials in Indianapolis in a message from Washington from Evans Woollen, fuel administrator for Indiana, who now is serving in Washington as an assistant to Dr. H. A Garfield, Federal Fuel Administrator. Mr. Woollen's particular field with the Federal Administration just now is distribution work.

Provision is made in the ruling for the storage of greater quantities of both steam and by-product coal in the Eastern States than in the Middle Western States, because of the increased demand for coal for special war purposes, particularly for the navy and transport service. The storage program was decided on very recently at a conference of all the State fuel administrators from States east of the Mississippi River.

Mr. Woollen, while in Washington, is attempting to find a solution of the problem confronting owners of gas plants in Indiana who find they are unable to manufacture a satisfactory grade of gas without the use of some coal from the Eastern fields. Mr. Woollen has just written Mr. Holliday to the effect that efforts are being made to handle this situation in such a way that relief will come to the gas companies involved, many of whom already have appealed to the public service commission of Indiana for relief. Mr. Woollen will attempt to gain permission for a limited supply of Eastern coal to be shipped to certain gas plants within the State.

Los Angeles Company Asks for Surcharge on Rates

The Los Angeles (Cal.) Gas & Electric Corporation has filed with the railroad commission an application for authority to add a surcharge to its gas rates in Los Angeles County. The company says that this increase is necessary to meet the high cost of materials, wages and taxes, caused by the war.

Grand Ledge Company Seeks Increase

The municipal gas plant at Grand Ledge, Mich., supplying the smallest city in the State to have a gas plant —a population of 2,500 to 3,000—is asking a rate of $2 per 1,000 cu. ft. for gas because of increased cost of operation. The proposition is up to the citizens.

Government Urges Restriction on Business and Manufacture of Lesser Importance

Although Gas Appliances Are Considered Essential, the War Service Committee Found It Necessary to Curtail a Percentage of Manufacture

The War Service Committee representing the manufacturers of gas ranges, gas water heaters, gas heaters and gas hot plates met by appointment Aug. 8, 1918, with the Priorities Committee, Hon. Edwin B. Parker, chairman, of the War Industries Board.

This report, preliminary in nature, will undertake to convey to you the general trend of developments and the requests of the Priorities Division.

The committee was given ample time to present its case and all essential features of our industry were carefully and thoroughly presented to the committee.

The needs of the Government in the successful prosecution of the war requires an ever-enlarging amount of material, money and man-power, and in order to supply these necessary things, it is the aim of the Government to curtail the operation and volume of businesses of lesser importance to the welfare of the people and the operation of the war. While it was admitted that gas appliances were considered essential, it was found necessary to apply this program literally.

Therefore, you will understand that this industry will be obliged to curtail its operations, to what extent has not yet been definitely determined, but the following may be looked upon as the operating conditions:

The industry as a whole will be expected for the remaining part of 1918, beginning Aug. 1, to restrict its operations in volume fixed by tons of output to an amount not greater than 40 per cent of five-twelfths of the volume in tonnage of the 1917 output. These figures must include any of the above appliances furnished to the Government.

(A) The Priorities Division requires that the use of nickel in all forms in manufacturing, including manifolds and hangers, be discontinued after Dec. 31, 1918, and, further, no nickel whatever is to be purchased by the manufacturer after Aug. 1, 1918. This requirement is also subject to the rule that the production and sale shall not exceed 40 per cent of five-twelfths in tonnage of the output of 1917. It is also important that manufacturers will not use present stocks to manufacture goods for the future in excess of these proportions.

In addition to the elimination of parts and sizes shown in the notice of July 8, it has been determined that the word "cooker" means an appliance having two or three top burners in line and with a very shallow oven, about 12 in. in depth. All other appliances where the ovens are 16 x 16, or 18 x 18, having four burners, are to be classified as ranges.

(B) Finally, when the percentage of operations and other conditions which it is expected may be required of the industry are finally decided upon, then all manufacturers will be required to pledge themselves in writing to abide by the principles and regulations promulgated by the Priorities Division of the War Industries Board, and failure to do so will automatically shut off supplies of fuels, essential materials and railroad facilities.

(C) You have received advices covering the elimination of 75 per cent of styles and sizes of appliances now manufactured, and you will understand that this elimination is an additional restriction in the reduction of volume mentioned above. The exception is that the styles and sizes which are not furnished, but for which the majority of parts are in stock, may be completed, but in no case may the total appliances shipped exceed in volume the 40 per cent of five-twelfths of the 1917 volume in tonnage above mentioned.

The Priorities Division, through its chairman, expressed the opinion that any manufacturer not having sufficient material on hand or being unable to procure same to permit shipping 40 per cent of five-twelfths of the tonnage of 1917, that the Priorities Division will use their best endeavor to supply such stocks.

The War Service Committee is anxious to assist the Government and manufacturers in every way to win the war at the earliest possible moment, and that the best interests of the Government and the manufacturers may be conserved towards this end, and quickly adjust your own affairs to this Government plan, it is requested that all communications received from the Government or this committee be treated as of the first importance and receive immediate attention.

The War Service Committe will be looked upon by the War Industries Board as the regulating body for this industry, and will be expected to supervise the actions of the members whom they represent. It hardly behooves us to mention that strict observance of all the conditions as outlined, and all others that may be passed from time to time, is the first duty of every manufacturer concerned, not only from the standpoint of the principles involved, but to further the aims of the Government in solving the problems before them.

Will Hold Hearing on Southern California Rate Case

Notification has been received that the hearing of the application for raise in rates made by the Southern California Edison Company will be held before the State railroad commission in Los Angeles.

The application was filed in San Francisco July 13, and set forth that the increased cost of operation incident to war conditions has resulted in a corresponding increase in the cost of the generation and distribution of electricity, which makes an advance in rates necessary in order that the company may continue to render efficient service and perform its duty to the public.

Boyertown Gas Company Sold

The Boyertown (Pa.) Gas Company's plant was purchased by George Malsberger and Dr. J. Elmer Porter, both of Pottstown, for $8,000.

The plant was sold at sheriff's sale for reason that mortgage on the property was foreclosed.

The plant was built in 1908 by the late Irvin East and W. S. Kess. Improvements to the extent of $35,000 have been made on the place since it was built.

THE MASSACHUSETTS GAS COMPANIES combined net earnings available for dividends of the subsidiary companies for July, the first month of the current fiscal year, were $448,540, a decrease of $51,458, or 10.29 per cent, compared with the corresponding month a year ago.

Pressure Tanks Are Being Erected by New Bedford Company

Officers Elected at Annual Meeting

The residents of Fairhaven who were put to no little inconvenience last winter by the low gas pressure during certain times of the day are to receive relief this year, and the company has made provision against a repetition of the trouble, according to a statement made at the annual meeting of the New Bedford Gas & Edison Light Company, which was held recently.

Mr. Snow, the general manager of the company, said that three good-sized pressure tanks are being erected on a tract of land secured by the company. These tanks, which are to be completed about Oct. 1, will be filled by compressor pumps during such times of the day or night when there is no great drain on the supply of gas, and will insure, even in times of greatest peak load, a sufficient pressure in all parts of Fairhaven.

The officers elected at the annual meeting are as follows: Directors—Lot B. Bates, Clarence A. Cook, Frank H. Gifford, Thomas F. Glennon, Henry M. Knowles, Parkman M. Lund, John S. Perry, William H. Pitman, Oliver Prescott, Charles R. Price, Frederic Taber and Francis E. Frothingham. Treasurer and clerk, Charles R. Price.

The statement of assets and liabilities as of June 30, was given as follows:

ASSETS

Land, buildings and machinery	$6,740,928.12
Inventory, material on hand	329,182.44
Cash	57,282.33
Insurance not accrued	7,646.34
Notes receivable	153,665.53
Deposits investment	31,031.25
Accounts receivable	195,134.46
Deferred bond expense	40,160.26
Liberty bond investment	108,750.00
Interest	2,222.03
	$7,665,820.76

LIABILITIES

Capital stock	$2,300,000.00
Premium account	1,343,270.95
Debenture bond account	1,500,000.00
Reserves for depreciation	288,287.81
Insurance reserve	25,619.35
Deposits by customers	38,650.23
Unpaid dividends	69,270.00
Notes payable	635,000.00
Accounts payable	45,702.52
Interest accrued	14,156.80
Pension reserve	6,383.32
Taxes accrued	44,707.53
Profit and loss surplus	412,467.25
Mortgage bond	850,000.00
Subscription account (new capital stock)	83,305.00
	$7,665,820.76

The condensed statement for year ending June 30, 1918, is as follows:

RECEIPTS

Gross receipts, gas department	$729,612.24
Expenses, gas department	593,176.92
Earnings	$186,435.32
Gross receipts electric department	1,100,998.09
Expenses, electric department	699,637.57
Earnings	$431,360.52
Receipts from other sources	55,429.56
Total net receipts	$623,225.40

DISBURSEMENTS

Dividends, 12 per cent.	$240,990.00
Interest	200,435.48
Taxes	105,766.48
Depreciation	125,000.00
Gas coal and tar adjustment	24,700.00
U. S. military service pay	8,414.53
Pension reserve	3,600.00
Red Cross, K. of C., etc.	4,800.00
Other expenses	19,078.08
Total disbursements	$725,584.57
Less dr. bal. to profit and loss account	102,359.17
	$623,225.40
July 1, 1917, surplus	514,826.42
Less deficit for year	102,359.17
July 1, 1918, surplus	412,467.25

THE PEOPLES NATURAL GAS COMPANY has completed another well on the Dwyer farm in Redbank, Clarion County, Pa., which will be a 60-bbl.-per-day producer.

THE HOPE NATURAL GAS COMPANY, in Court House district, Lewis County, Pa., has completed its well on the A. D. Park farm and has a 20-bbl.-per-day producer in the Gordon stray sand. In Salt Lick district, Braxton County, the same company has completed a good gas well on the W. A. Nicholson farm.

Gas Franchise Taken Up by City

A special committee consisting of Commissioners Kelley, Oltman and Clark was named recently by Mayor Gallmeyer to begin framing the city's policy to be followed when the Grand Rapids Gas Light Company's franchise expires May 9, 1920. This was done on recommendation of City Attorney Taggart, who informed the commission the city could grant the company a new franchise, start a municipal plant or condemn the company's property when the franchise expires. The committee will also consider the form of franchise to be granted if one is granted the company.

Rate Raised at Chambersburg

The Chambersburg (Pa.) Gas Company, operating in Chambersburg, Franklin County, recently filed with the public service commission new rates, effective Sept. 3, making following changes in existing rates:

The straight gross rates of $1.50 per 1,000 cu. ft. for illuminating and cooking and $1.35 per 1,000 cu. ft. for gas engines are changed to a graduated scale ranging from $1.75 to $1.10 gross per 1,000 cu. ft.

Minimum charge is increased from 15 cents to 50 cents per meter per month and a discount of 10 per cent is changed to 10 cents per 1,000 cu. ft.

Atlanta Gas Light Company Granted Increase

The Atlanta (Ga.) Gas Light Company, a subsidiary corporation of the Georgia Railway & Power Company, has been handed down decisions and orders in its petition for an increase in its gas rates allowing substantial raises.

The commission granted increases in practically all branches of the service furnished by these corporations, the pro rata of increases falling heavier on the small consumers.

The gas rate for the first 10,000 cu. ft. is increased from $1.10 per 1,000 to $1.25 per 1,000, gross.

THE CARNEGIE NATURAL GAS COMPANY, on Slade Creek, Pa., in Union district, Ritchie County, has completed its initial test well on the J. Bayne farm, and it is a duster in all sands. W. S. Chapman farm No. 1 is a fair gasser in the Big Injun sand.

Gas Booster Installed at Plant of Rutland Company

Consumers Will Be Annoyed No Longer by Low Pressure, Company Declares

The Rutland (Vt.) Railway, Light & Power Company put into operation a Sturtevant gas booster designed to overcome the difficulty of low pressure during hours when gas is being used to a greater extent than at any other time. The apparatus increases the pressure at the plant about 100 per cent. It was ordered last February and the local concern expected to have it in operation in June, but because of shipping conditions it was not possible to get all of the parts and assemble them until recently.

Between 11 and 12 o'clock in the morning so many families use gas for cooking purposes, especially during the summer time, that it has been difficult to maintain a pressure that would give good service in all parts of the city, complaints having been received particularly from the vicinity where patrons are the greatest distance from the plant. The booster will do away with all such trouble. It will be turned on daily when the indicator shows that pressure is below normal, and will insure a proper gas supply to every part of the city where the company has pipes.

The booster is of the fan type and is run by a 5-hp. motor. It can be controlled so that the increase of pressure may be checked when it reaches a certain point. Three to 4 in. on the indicator is the figure usually maintained at the plant.

Rates at Wharton Are to be Increased Sept. 1.

Circulars and instructions have been issued by the Texas Gas & Electric Company that a raise of 25 per cent will be made effective on Sept. 1, and to continue until the conclusion of the war. This raise will not affect the municipality, as the city corporation has a ten-year contract with the company at a specific rate which was made several years ago.

The Pacific Gas & Electric Company has filed an application with the California Railroad Commission for authority to issue and sell before the end of 1918 $5,000,000 of its general and refunding mortgage bonds at not less than 85, or $5,000,000 of its first preferred stock at not less than 82½.

Union Gas & Electric Gets Government Loan

The Government will lend the Union Gas & Electric Company, a subsidiary of the Columbia (Ohio) Gas & Electric Company, approximately $2,000,000 for the erection of a third unit of 30,000 kilowatts at its new generating plant in Cincinnati. The loan runs five years, and is payable at the company's option at any time prior to maturity.

New Well Brought in by Columbia Company

Continuation of its drilling operations on the David Ward tract in the Kelley Creek, Pa., section of Kanawha County, W. Va., according to a telegram given out recently by A. B. Leach & Company, Inc., has resulted in the Columbia Gas & Electric Company bringing in another new well, flowing at a depth of 150 ft., at the rate of 250 bbl. a day. This well is additional to well No. 5 on this tract recently brought in with 2,000 bbl., and showing a settled rate, the report states, of 500 and 600 bbl.

Gas Plant of Western Fuel Company Sold

The plant of the Western Fuel, Gas & Power Company at Hermosa Beach, Cal., together with pipe lines, franchises and rights of way in Hermosa, Manhattan and Redondo Beaches, was transferred to the Southern California Gas Company by a deed filed recently at the county recorder's office.

The sale was approved by the railroad commission, the purchase price being $145,000. The sale does not include the land on which the plant is situated. A three-year lease of the land to the Southern California Gas Company also was filed. The company is given the option of purchasing a portion of the property at the end of three years on the basis of $2,000 an acre.

The Columbia Gas & Electric Company, of Huntington, W. Va., reports earnings as follows for July:

	1918	Increase
Gross earnings...	$789,700	$45,413
Total net.....	532,151	36,833
Surplus	17,309	22,448
From Jan. 1 to July 31:		
Gross earnings...	6,884,824	453,098
Total net.	4,681,489	205,208
Surplus	2,188,602	149,419

New Rate Schedule of Municipal Gas Company Refused by Public Service Commission

Maintaining that the proposed new rate schedule sought by the Municipal Gas Company, Albany, N. Y., is in violation of the enactment fixing the maximum price to be charged for gas at $1 per 1,000 cu. ft., the public service commission has refused to accept this schedule filed with the commission recently.

The unofficial notice of the commission's action is as follows:

"The Municipal Gas Company's tariff which it proposed to put into effect on Sept. 26, under which it intended to charge $1.30 per 1,000 cu. ft. for the first 25,000 cu. ft., $1.20 for the next 20,000 cu. ft. and $1.05 for excess amounts, with no maintenance or prompt payment discounts, was refused by the Public Service Commission, Second District.

"Acceptance for filing was refused by the commission at its regular session, Chairman Charles B. Hill presiding, on the ground that the tariff, in its charges, is in violation of Chapter 227, Laws of 1907, limiting the price of gas in Albany to $1 per 1,000 cu. ft.

"It is understood the gas company anticipated this action by the commission by reason of its dismissal of the petition of the company asking for increased rates on May 14."

An appeal from this ruling will be taken to the courts.

Empire Gas & Electric Company Issues Rates for Steam Heat

The Empire Gas & Electric Company evidently considers the time ripe to advise consumers of city steam that they may make new contracts for this winter now, and on a basis of big increase in cost for the service over past years.

In the first place there is to be a minimum charge of $10 per month, then they will charge at the following rates: $1 15 per 1,000 lb. for the first 10,000 lb. of steam heat consumed in any one month or less. Then the price will be $1.05 per 1,000 lb. for the next 20,000 lb. The third rate will be 95 cents per 1,000 lb. for the next 20,000 lb. The lowest rate for the large consumer will be 65 cents per 1,000 lb. for all over 300,000 lb. consumed in any month.